

**GRADE 8**  
**CURRICULUM PACKAGE**  
February 2012

*Creating  
Futures*



2012



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## INTRODUCTION

This document contains grade level learning outcomes and suggested achievement indicators for Grade 8 students. The SSDEC Curriculum Grade Level Packages for K-9 are available at [www.ssdec.nt.ca](http://www.ssdec.nt.ca).

*The Grade 8 Curriculum Package is not intended to replace the complete versions of the approved NWT Curriculum. Please be advised that educators will serve their students best by engaging with full curriculum for each discipline as these provide the philosophy behind its development as well as valuable tools for delivery of concepts.*

### Dene Kede

Dene Kede, the culture-based curriculum of the NWT, serves as the heart of the NWT Curriculum. Dene Kede was developed under the guidance of Dene elders and shares, through its teachings, the knowledge, skills, and values of the Dene. These cultural understandings serve as the underpinnings for all learning in all content areas and it is expected that the teachings and knowledge contained within Dene Kede shall be woven into all lessons. In this manner our students will become more capable, more successful and better able to *walk in two worlds*.

### Required Areas of Study

- English Language Arts
- Mathematics
- Science
- Social Studies
- Health
- Physical Education
- Arts: Dance, Drama, Music and Visual Art

Additional information can be found at <http://www.ece.gov.nt.ca/> under the Kindergarten to grade 12 link, which will take you to the tab called, Curriculum Services.

### How to Use This Document

Suggested uses for this document might include, supporting:

- *Multi-graded classrooms*
- *Student Support Plans*
- *Students' understanding of where specific learning outcomes become more sophisticated and challenging*
- *Parents' understanding of where their student may currently be in their learning and what they are ready for next*

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## DENE KEDE GRADE 8

### Strong Like Two People:

**Module Purpose:** to motivate student to pursue educational goals which include learning in Dene and non-Dene cultures

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Major Cultural Understanding:</b> Education in both cultures creates a person who is "Strong Like Two People".	
Explain ways that education in both cultures creates a person who is "Strong Like Two People".	<ul style="list-style-type: none"> <li>• Demonstrate understanding of how academic and cultural education creates a person who is Strong Like Two People.                             <ul style="list-style-type: none"> <li>○ S/he can operate in and enjoy both cultures.</li> <li>○ S/he has the trust of both cultures and can help the two to understand each other.</li> <li>○ S/he will be able to make positive choices from both cultures.</li> </ul> </li> </ul>
<b>Major Cultural Understanding:</b> Being "Strong Like Two People" will provide more opportunities for the student.	
Describe how being "Strong Like Two People" will provide more opportunities for the student.	<ul style="list-style-type: none"> <li>• Explain opportunities that might include:                             <ul style="list-style-type: none"> <li>○ Occupational choices and higher standards of living</li> <li>○ Prestige</li> <li>○ Gain knowledge and therefore influence</li> <li>○ Ability to help Dene in complex areas of economic and political development</li> <li>○ Ability to learn and experience the world</li> </ul> </li> </ul>
<b>Major Cultural Understanding:</b> Attitudes for becoming "Strong Like Two People"	
Identify attitudes for becoming "Strong Like Two People"	<ul style="list-style-type: none"> <li>• Explain benefit of attitudes such as:                             <ul style="list-style-type: none"> <li>○ Setting academic and cultural goals</li> <li>○ Seeking learning experiences and support</li> </ul> </li> </ul>
<b>Major Cultural Understanding:</b> Strategies for goal setting	
Identify various strategies for goal setting	<ul style="list-style-type: none"> <li>• Visualize self in five years as a young adult</li> <li>• Assess personal strengths and weaknesses that will help or hinder in reaching long-term goals</li> <li>• Identify year-end goals</li> <li>• Identify what must be done to reach goals</li> <li>• Identify people to help them reach their goals</li> <li>• Identify shorter-term goals</li> </ul>
<b>Hunting Camp</b>	
<b>Module Purpose:</b> to give students the knowledge and understandings related to a spring or fall hunting camp and to give them the experience of a fall hunting camp.	
<b>Major Cultural Understanding:</b> Dene knowledge of the hunting area is important to hunting success and safety.	
Explain ways in which Dene knowledge of the hunting area is important to hunting success and safety.	<ul style="list-style-type: none"> <li>• Describe route landmarks and Dene names</li> <li>• Identify geographical features, landmarks and spiritual site in the area</li> <li>• Identify potentially dangerous areas</li> <li>• Explain importance of historical land use information</li> <li>• Identify seasonal uses of area by community</li> </ul>
<b>Major Cultural Understanding:</b> Dene knowledge of game is important for hunting success.	
Describe how Dene knowledge of game is important for hunting success.	<ul style="list-style-type: none"> <li>• Identify small game found at hunting location</li> <li>• Identify small game and caribou habitat, life cycles and habits (Note: Caribou are to be studied only if people in the community hunt them. This can be substituted with any other large game hunted in the fall or spring.)</li> <li>• Describe hunting techniques based on knowledge of game</li> <li>• Identify other resources in the area used by the community</li> </ul>

## DENE KEDE GRADE 8

### Hunting Camp

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Major Cultural Understanding:</b> Attitudes related to camping and hunting	
Explain significance of attitudes related to camping and hunting	<ul style="list-style-type: none"> <li>• Explain importance of showing respect toward others and the land</li> <li>• Ways to learn in unfamiliar situations</li> <li>• Demonstrate taking responsibility and leadership in doing camp chores</li> <li>• Demonstrate following leadership of the hunt leader during the hunt</li> <li>• Demonstrate patience and determination</li> </ul>
<b>Major Cultural Understanding:</b> Skills related to land travel and camping	
Demonstrate skills related to land travel and camping	<ul style="list-style-type: none"> <li>• Demonstrate setting up and maintaining a camp</li> <li>• Demonstrate using a map for travel</li> <li>• Demonstrate computing travel distances using a map</li> <li>• Demonstrate canoe handling</li> <li>• Demonstrate using direction indicators</li> </ul>
<b>Major Cultural Understanding:</b> Skills related to hunting	
Demonstrate skills related to hunting	<ul style="list-style-type: none"> <li>• Illustrate how to predict weather</li> <li>• Demonstrate skills of: tracking, pursuing and shooting game</li> <li>• Demonstrate the making of stretchers or other equipment required for small game</li> </ul>
<b>Major Cultural Understanding:</b> Skills related to Dene laws	
Explain/demonstrate various skills related to Dene laws	<ul style="list-style-type: none"> <li>• Ways of honouring water, land and fire</li> <li>• Illustrate handling game and equipment with respect</li> <li>• Describe reasons for hunting only as much as can be used and using as much of the parts as possible</li> </ul>
<b>Major Cultural Understanding:</b> Skills related to land and water safety and survival	
Explain/demonstrate skills related to land and water safety and survival	<ul style="list-style-type: none"> <li>• Explain ways of making shelter: moss huts with smoke fire, spruce bark</li> <li>• Describe how to make a shelter with pitch and roots and poles, spruce bough shelters</li> <li>• Explain first aid for burns, cuts and broken bones review</li> <li>• Demonstrate and/or describe practice of gun safety</li> <li>• Explain ways of finding direction using stars and wind and sun</li> <li>• Illustrate using ingenuity "when tools are not available</li> <li>• Describe/demonstrate how to make basic repairs to small engines</li> </ul>
<b>Major Cultural Understanding:</b> Skills related to handling hunting and camping equipment and supplies	
Explain/demonstrate skills related to handling hunting and camping equipment and supplies	<ul style="list-style-type: none"> <li>• Explain ways of gathering hunting equipment and basic camping supplies</li> <li>• Explain ways of packing for efficiency</li> </ul>
<b>Major Cultural Understanding:</b> Skills related to handling game	
Explain/demonstrate skills related to handling game	<ul style="list-style-type: none"> <li>• Explain ways of:                             <ul style="list-style-type: none"> <li>○ Cleaning and butchering</li> <li>○ Making caches</li> <li>○ Smoking meat or making drymeat</li> <li>○ Cooking meat on a campfire</li> <li>○ Packing meat</li> </ul> </li> </ul>

## DENE KEDE GRADE 8

### Birchbark Canoes

**Module Purpose:** to give students an awareness and appreciation of the science and technology behind the Dene birchbark canoes, an understanding of the historical importance of the canoe, and experience with working with land materials in a Dene way

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Major Cultural Understanding:</b> The birch bark canoe is an example of the sophistication of traditional Dene technology.	
Explain ways in which the birch bark canoe is an example of the sophistication of traditional Dene technology.	<ul style="list-style-type: none"> <li>• Describe the scientific and technological principles of structure and materials used for:               <ul style="list-style-type: none"> <li>○ Creating maneuverability and speed for the canoe</li> <li>○ Creating canoe durability</li> <li>○ Creating ability of canoe to bear weight</li> <li>○ The scientific principles involved in:                   <ul style="list-style-type: none"> <li>○ Slipstreaming</li> </ul> </li> </ul> </li> </ul>
<b>Major Cultural Understanding:</b> Canoes were a very important part of Dene history and culture.	
Identify how canoes were a very important part of Dene history and culture.	<ul style="list-style-type: none"> <li>• Provide details regarding how canoes were a part of history and culture of the Dene in the following ways:               <ul style="list-style-type: none"> <li>○ Uses of birch bark vs. Spruce vs. Moose hide canoes by</li> <li>○ Various tribes and in various seasons</li> <li>○ Caribou hunting</li> <li>○ Fishing</li> <li>○ Muskrat hunting</li> <li>○ Trading</li> <li>○ Enabled extensive hunting territory during summer</li> <li>○ Months                   <ul style="list-style-type: none"> <li>○ Into the barrens</li> <li>○ Down mountains</li> </ul> </li> </ul> </li> </ul>
<b>Major Cultural Understanding:</b> Canoe building involved expertise and cooperation.	
Explain ways in which canoe building involved expertise and cooperation.	<ul style="list-style-type: none"> <li>• Describe how Birchbark and moose hide canoes were built involving the efforts of many people working cooperatively together.</li> <li>• Explain reasons why learning how to build the canoes required many years of experience with others more knowledgeable and experienced in the making and using of canoes.</li> <li>• Explain ways in which those who were very skilled at building birchbark or moose skin canoes were highly esteemed people because the canoe designs were the result of generations of Dene experimenting and learning from one another. The knowledge passed down from one to another was very complex and invaluable.</li> </ul>
<b>Major Cultural Understanding:</b> The land was shown respect when taking materials for canoe building.	
Describe way that the land was shown respect when taking materials for canoe building.	<ul style="list-style-type: none"> <li>• Explain how bark was taken from trees in such a way that the trees were not killed.</li> <li>• Describe ways that the land was honoured for the resources it gave 10 enable life.</li> </ul>
<b>Major Cultural Understanding:</b> Skills related to working with wood.	
Describe and/or demonstrate skills related to working with wood.	<ul style="list-style-type: none"> <li>• Describe how to:               <ul style="list-style-type: none"> <li>○ Work with spruce wood, spruce root, birchbark, spruce gum and moss</li> <li>○ Work with wood working tools</li> </ul> </li> <li>• Explain ways in which to achieve wood working while in the bush</li> </ul>



## DENE KEDE GRADE 8

### Birchbark Canoes

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Major Cultural Understanding:</b> Attitudes related to working with wood.	
Explain positive attitudes related to working with wood.	<ul style="list-style-type: none"> <li>• Describe how to demonstrate respecting and learning from resource people or Elders</li> <li>• Explain value of reflecting on personal talents and interests with respect to new experiences</li> <li>• Demonstrate how to show patience and determination while developing one's woodworking skills</li> </ul>
<b>Leadership</b>	
<b>Module Purpose:</b> to give students an understanding of the meaning of Dene leadership, to provide them with stories of Dene leaders and heroes, and to give them a sense of what Dene leadership mean today.	
<b>Major Cultural Understanding:</b> A traditional Dene leader was one who enabled others to survive.	
Explain how a traditional Dene leader was one who enabled others to survive.	<ul style="list-style-type: none"> <li>• Identify ways in which food and security were provided to those who went with a leader because of the leader's special abilities.</li> </ul>
<b>Major Cultural Understanding:</b> Traditionally, Dene leaders were spiritual leaders.	
Explore and explain how traditionally, Dene leaders were spiritual leaders.	<ul style="list-style-type: none"> <li>• Explain ways in which they lived morally good lives.</li> <li>• Explore and describe how they were prophets with messages to the Dene from the Creator.</li> <li>• Provide details of how they reminded Dene that there was a power greater than them and that they had to be humble in their living.</li> </ul>
<b>Major Cultural Understanding:</b> Traditional Dene leaders had special abilities and attitudes.	
Identify traditional Dene leaders had special abilities and attitudes.	<ul style="list-style-type: none"> <li>• Describe how they led by example rather than by force or persuasion.</li> <li>• Identify how that they were the most capable providers.</li> <li>• Explain ways that they knew the land exceptionally well and were hardworking.</li> <li>• Explore ways that they were often spiritual people possessing medicine powers that they used for the good of the people.</li> <li>• Describe their foresight and planned ahead.</li> <li>• Explain ways in which they demonstrated they were concerned with the welfare of the whole group, rather than simply themselves and their families.</li> <li>• Provide examples of ways they were generous.</li> <li>• Explain how they were humble. They did not brag about their abilities, nor did they abuse their power by imposing their wishes on people.</li> <li>• Describe how they recognized that their leadership was based on the support of others.</li> <li>• Provide examples of how they were often good orators and communicators.</li> </ul>
<b>Major Cultural Understanding:</b> Traditionally, leaders were identified by Elders and led through consensus.	
Explore ways in which traditionally, leaders were identified by Elders and led through consensus.	<ul style="list-style-type: none"> <li>• Explain why people did not compete for leadership nor were there elections.               <ul style="list-style-type: none"> <li>○ Instead, a person became a leader when others chose to follow him or her (traditionally, the leaders were predominantly male) because of his abilities and attitudes.</li> </ul> </li> <li>• Describe the impact of there being no law that said that everyone must follow the same leader. Those who did not wish to follow that person were free to go their own way or to make their own decisions.</li> <li>• Explore ways in which elders and the most experienced were influential deciding who should be chosen as leader. Every person did not have equal influence or power in deciding who to follow.</li> </ul>

## DENE KEDE GRADE 8

### Leadership

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Major Cultural Understanding:</b> Traditionally, leadership was based on consensus.	
Explain how traditionally, leadership was based on consensus.	<ul style="list-style-type: none"> <li>• Describe how all those who depended upon his leadership chose him freely to be their leader. They gave the leader their full support in carrying out any decision that was made for the group. There was little in the way of fighting. Those who felt strongly in opposition to a leader could go their own way.</li> <li>• Explain how those who dissented were free to speak their minds to the leader. A good leader would hear all voices, especially those of the Elders and find a solution that suited everybody's concerns (consensus decision-making).</li> <li>• Describe how once consensus was reached and a decision made, it was expected that all the people in the group would act responsibly and efficiently in carrying out the decision. To do otherwise threatened the safety of the group.</li> </ul>
<b>Major Cultural Understanding:</b> Traditionally, there were different levels of Dene leadership.	
Identify how traditionally, there were different levels of Dene leadership.	<ul style="list-style-type: none"> <li>• Describe and discuss various levels of Dene Leadership, including:               <ul style="list-style-type: none"> <li>○ The band camp - this was the main group of the Dene in traditional times. Most of their time was spent living within this group (see Grade 7 - Module Four). Often the camps were made up of extended families and friends and followers. The leader of this camp was often a male head of the extended family, a person who displayed all the characteristics of a good leader.</li> <li>○ The tribe – when bands would come together for special annual hunts or celebrations, usually one person was chosen to speak for all of them. This tribal leader would meet with the bandleaders and Elders to make decisions concerning the tribe.</li> <li>○ The hunting group or family camp - Small hunting groups would sometimes go off from the band camp to hunt and live, especially when food was scarce. These groups were usually made up of family, a father perhaps and one or two grown sons with their wives and children. The father or oldest hunter was the leader while they were away from the band.</li> </ul> </li> </ul>
<b>Major Cultural Understanding:</b> Non-Dene forms of selecting leadership have been introduced to the Dene.	
Explain how non-Dene forms of selecting leadership have been introduced to the Dene.	<ul style="list-style-type: none"> <li>• Describe the impact of fur trade on Dene Leadership, those who dealt with the traders in the name of the camp or band became leaders.</li> <li>• Explain how after treaty, elected chief and councilors became official leaders.</li> <li>• Illustrate how/why today, elected mayors and Members of the Legislative Assembly (MLAs) form a part of Dene leadership.</li> </ul>
<b>Major Cultural Understanding:</b> Dene perspectives on leadership are still valued and practiced.	
Describe way in which Dene perspectives on leadership are still valued and practiced.	<ul style="list-style-type: none"> <li>• Provide examples of leaders who are humble and generous and explain why they are preferred.</li> <li>• Identify reasons why leaders are chosen for their skills and abilities in required areas.</li> <li>• Show ways that leaders consult with Elders for guidance.</li> <li>• Explore/discuss ways that support and cooperation are given to chosen leaders.</li> <li>• Show how consensus and negotiation are used in decision-making.</li> <li>• Explore/discuss ways that Dene Elders today use their Dene perspectives and knowledge about the land to help them to make decisions about how the land is to be used.</li> </ul>

## DENE KEDE GRADE 8

### Leadership

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Major Cultural Understanding:</b> Attitudes that accompany good leadership.	
Explore attitudes that accompany good leadership.	<ul style="list-style-type: none"> <li>• Explain ways in which the following attitudes contribute to good leadership:               <ul style="list-style-type: none"> <li>○ Taking leadership if one has the required abilities and knowledge</li> <li>○ Acknowledging talents in one another</li> <li>○ Having input into choosing leadership and supporting it once chosen</li> <li>○ Being humble, patient and generous</li> <li>○ Leading by example rather than force</li> </ul> </li> </ul>
<b>Major Cultural Understanding:</b> Skills that accompany good leadership.	
Discuss skills that accompany good leadership.	<ul style="list-style-type: none"> <li>• Weigh the value of these various skills on good leadership:               <ul style="list-style-type: none"> <li>○ Communicating needs</li> <li>○ Listening to concerns and voices of others</li> <li>○ Consulting with experienced people for guidance</li> <li>○ Making decisions based on the welfare of the whole rather than selected individuals</li> <li>○ Recognizing that their position is based on the support of others</li> </ul> </li> </ul>
<b>Discovering Our Dene Talents</b>	
<b>Module Purpose:</b> to provide students with the learning attitudes and skills required to further develop their Dene skills	
<b>Major Cultural Understanding:</b> Practice is essential for developing the basic Dene Skills.	
Explain ways in which practice is essential for developing the basic Dene Skills.	<ul style="list-style-type: none"> <li>• Explore and describe ways that various skills are developed with much practice and constant learning:               <ul style="list-style-type: none"> <li>○ Mental attitude is important in being able to develop skills.</li> <li>○ Setting personal goals and being determined to accomplish them.</li> <li>○ Basic skills are often learned by watching and learning from family members.</li> <li>○ Watching others learn and practice can develop skills.</li> </ul> </li> </ul>
<b>Major Cultural Understanding:</b> Developing one's Dene skills gives focus and meaning to life.	
Explore ways in which developing one's Dene skills gives focus and meaning to life.	<ul style="list-style-type: none"> <li>• Describe how the development of Dene skills requires discipline and commitment, which are important to any life endeavour.</li> <li>• Explain ways in which skill development is a lifetime activity.</li> <li>• Describe how sharing and teaching one's skills to others is rewarding.</li> <li>• Identify ways in which one's skills may become one's livelihood.</li> <li>• Explore and describe how developing and sharing Dene skills strengthens the Dene culture.</li> <li>• Identify how one's developed skills may be seen as work done for the Creator.</li> </ul>
<b>Major Cultural Understanding:</b> Development of Dene skills	
Describe the development of Dene skills	<ul style="list-style-type: none"> <li>• Identify impact of developing one's basic Dene skills</li> <li>• Explain ways to explore and experience a wide range of Dene skills</li> </ul>
<b>Major Cultural Understanding:</b> Attitudes helpful in developing basic Dene skills	
Identify attitudes that are helpful in developing basic Dene skills	<ul style="list-style-type: none"> <li>• Identify and justify attitudes that are helpful in developing basic Dene skills, such as:               <ul style="list-style-type: none"> <li>○ Persevering without frustration</li> <li>○ Taking risks that could lead to error and correction</li> <li>○ Making the choice to practice with one's personal time</li> <li>○ Taking opportunities to observe and listen to family and community members as they work on their Dene skills</li> <li>○ Sharing one's work with others so as to learn from one another</li> </ul> </li> </ul>

## DENE KEDE GRADE 8

### Discovering Our Dene Talents

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Major Cultural Understanding:</b> Strategies for developing basic Dene skills	
Explore and describe strategies for developing basic Dene skills	<ul style="list-style-type: none"> <li>• Demonstrate the setting small goals for oneself</li> <li>• Explain the value of promising small rewards for oneself as one makes progress</li> <li>• Describe the value of reminding self that perfection only comes with practice</li> <li>• Describe the value of reminding self of the potential value of the Dene skills one is developing</li> <li>• Describe the value of reminding self of cultural pride and pride in work for the creator</li> </ul>

## ELA GRADE 8

**GO #1** Students will listen, speak, read, write, view and represent to access and explore prior knowledge and experiences of self and others.

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Listen critically and discuss the differences in interpretations and understandings 1.1.1	<ul style="list-style-type: none"> <li>• Describes own observations and interpretations, including prior knowledge</li> <li>• Reflects on own observations and interpretations</li> <li>• Listens respectfully and seeks others' points of view</li> <li>• Uses others' ideas, perspectives, responses to develop personal thinking and apply understanding in a variety of situations</li> <li>• Talks about similarities and differences between own and others' observations, ideas, and interpretations</li> <li>• Uses others' ideas, perspectives, and responses, to develop personal thinking and applying understandings in a variety of situations</li> <li>• Discusses the differences in personal interpretations and understandings with those of others</li> <li>• Begins to integrate others' ideas, perspectives, and responses to develop personal understandings</li> </ul>
Pursue personal interest in specific genres by particular writers, artists, storytellers, film makers; seeking recommendations from others 1.1.2	<ul style="list-style-type: none"> <li>• Chooses appropriate texts independently and/or following recommendation</li> <li>• Explains personal preferences for specific genres, works, authors/ artists, using examples</li> <li>• Highlights craft and artistry of preferred genres, works, and/or authors/artists, using examples</li> </ul>
Describe, assess, and monitor personal language goals to enhance language learning and use 1.1.3	<ul style="list-style-type: none"> <li>• Considers examples of, and participates in discussions about, the purposeful &amp; effective use of language</li> <li>• Collaboratively develops and revises criteria to assess language use</li> <li>• Uses strengths and challenges to set and monitor goals to improve language use</li> </ul>
Reflect on prior knowledge and experiences, and structure and restructure ideas and information in meaningful ways, in order to clarify, extend and revise conclusions and understandings 1.2.1	<ul style="list-style-type: none"> <li>• Revises understandings and/or conclusions based on new information</li> <li>• Chooses and/or adapts and applies methods of organizing ideas and information that synthesize ideas from various sources</li> <li>• Extends questions and answers to clarify, connect and reflect on others' ideas, information, and experiences</li> </ul>
Summarize, explain, and represent personal viewpoints in clear and purposeful ways 1.2.2	<ul style="list-style-type: none"> <li>• Summarizes/explains own viewpoints with a specific audience in mind</li> <li>• Uses purposefully-chosen features of oral language, visuals, and/or other media to present personal viewpoints</li> </ul>
<b>GO #2</b> Students will listen, speak, read, write, view and represent to comprehend and respond personally and critically to oral, print, and other media texts, through a process.	
Make and explain connections between previous experiences, prior knowledge, and texts 2.1.1	<ul style="list-style-type: none"> <li>• Explains how new ideas and information (resulting from connections between prior knowledge, texts &amp; experiences) are integrated into personal understandings</li> <li>• Uses questioning and paraphrasing in discussions to understand connections others have identified</li> <li>• Explains how connections developed from text exploration lead to new understandings</li> </ul>
Select and/or adapt and use appropriate comprehension strategies to construct, revise and explain understanding of texts 2.1.2 <i>*using texts with a suitable complexity of content and style</i>	<ul style="list-style-type: none"> <li>• Reflects upon and explains own reading behaviours</li> <li>• Selects, adapts and uses thinking and/or comprehension strategies to construct and confirm understanding</li> <li>• Monitors understanding of texts</li> <li>• Explains revised understanding of text based on new information</li> <li>• Sets a purpose for listening, viewing or reading to anticipate meaning</li> </ul>

## ELA GRADE 8

**GO #2** Students will listen, speak, read, write, view and represent to comprehend and respond personally and critically to oral, print, and other media texts, through a process.

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Use textual cues to construct and confirm meaning within and across texts 2.1.3	<ul style="list-style-type: none"> <li>• Uses textual cues to anticipate, construct, and confirm meaning from <b>narrative</b> text (add: <b>theme, perspectives</b>)</li> <li>• Uses textual cues to anticipate, construct, and confirm meaning from <b>expository</b> text</li> <li>• Uses textual cues to anticipate, construct, and confirm meaning from <b>poetic</b> text</li> </ul>
Explain how vocabulary, language structure and context help readers construct meaning of texts 2.1.4	<ul style="list-style-type: none"> <li>• Selects, adapts and uses a variety of strategies to construct and confirm meanings of both known and unfamiliar words</li> <li>• Describes and explains how text structures, punctuation, and word order relate to the meaning of the text</li> <li>• Explains personal interpretations of author’s or creator’s purpose, audience, and choice of structure or form</li> </ul>
Explore a variety of oral, print, and media texts 2.2.1	<ul style="list-style-type: none"> <li>• Sets a purpose for reading, listening to, or viewing oral, print, and other media texts from diverse cultures</li> <li>• Explores a variety of narrative, expository, and poetic texts and explains preferences for particular texts (<b>Required GR8: novels, short stories, scripts, critiques, memoirs</b>)</li> </ul>
Respond to texts creatively and critically 2.2.2	<ul style="list-style-type: none"> <li>• Explains personal responses to shared and independent listening, reading, and viewing experiences</li> <li>• Responds through creative writing and representation to shared and independent listening, reading, and viewing experiences</li> </ul>
Identify and compare ideas, points of view, and bias, in and across texts 2.2.3	<ul style="list-style-type: none"> <li>• Compares how groups of people are portrayed in and across texts</li> <li>• Compares bias and stereotypes in and across text</li> <li>• Compares portrayals of various characters, communities and/or cultures in and across texts</li> <li>• Compares how personal understanding of cultures , communities are influenced by different texts</li> <li>• Compares how similar ideas and themes are explored in texts from various cultures and communities</li> </ul>
Examine the relationship between genres/forms and audience/purpose 2.3.1	<ul style="list-style-type: none"> <li>• Identifies how genre or form of texts are related to <b>audience</b> and <b>purpose</b></li> <li>• Compares strengths and limits of various forms and genres</li> <li>• Discusses literature in reference to sub-genres</li> </ul>
Compare how techniques and elements are used in texts 2.3.2	<ul style="list-style-type: none"> <li>• Compares <b>elements</b> within and across narrative, expository, and poetic texts (add: <b>subtext, motive, antagonist, protagonist</b>)</li> <li>• Compares <b>techniques</b> used to support narrative, expository, and poetic texts (add: <b>prologues, epilogues, camera shots</b>)</li> </ul>

## ELA GRADE 8

**GO #2** Students will listen, speak, read, write, view and represent to comprehend and respond personally and critically to oral, print, and other media texts, through a process.

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Compare effects of descriptive and figurative language and stylistic techniques within and across a variety of texts 2.3.3	<ul style="list-style-type: none"> <li>• Compares effects of <b>word choice</b> and <b>stylistic techniques</b> within and across texts</li> <li>• Compares how authors express voice in oral, print, and other media texts</li> <li>• Compares connotation and denotation of language choices using contextual evidence</li> </ul>
<b>GO #3</b> Students will listen, speak, read, write, view and represent to plan and focus an inquiry or research and interpret and analyze information and ideas, through a process.	
Identify prior knowledge of, and prior experiences related to, a topic to choose a focus for own and group inquiry 3.1.1	<ul style="list-style-type: none"> <li>• Summarizes prior personal and factual knowledge related to a topic of inquiry or research</li> <li>• Identifies missing categories and information gaps in knowledge about a topic of inquiry or research</li> <li>• Uses self-questioning to choose a focus for an inquiry or research topic</li> <li>• Uses categories, gaps in knowledge, and questions to plan next steps for inquiry or research topic</li> </ul>
Develop broad and specific questions to establish a purpose for seeking information on a topic in own and group inquiry 3.1.2	<ul style="list-style-type: none"> <li>• Develops broad and specific open-ended questions on an inquiry topic</li> <li>• Generates broad and specific relevant questions to deepen and extend thinking throughout the inquiry process</li> </ul>
Create, and/or adapt and reflect on a plan to collect, record and synthesize information in own and group inquiry 3.1.3	<ul style="list-style-type: none"> <li>• Identifies <b>purpose</b> and <b>audience</b> for an inquiry</li> <li>• Chooses and/or adapts and reflects on use of strategies for collecting and recording information</li> <li>• Chooses and/or adapts strategies and formats for organizing, synthesizing, and sharing inquiry info</li> <li>• Creates a plan to meet a specified time frame for inquiry</li> <li>• Reflects on the plan during and at end of inquiry</li> </ul>
Identify relevant primary and secondary sources to answer inquiry or research questions 3.2.1	<ul style="list-style-type: none"> <li>• Identifies <b>primary</b> and <b>secondary</b> sources of information relevant to inquiry topic</li> </ul>
Develop and use criteria to evaluate usefulness and reliability of, and perspectives within, sources 3.2.2	<ul style="list-style-type: none"> <li>• Matches source(s) to the focus and/or purpose of inquiry using criteria developed by/with students</li> <li>• Determines usefulness of source(s) using specific criteria developed by/with students</li> <li>• Determines reliability of and perspectives in source(s) using specific criteria built by/with students</li> </ul>
Use text features and references tools to identify relevant information 3.2.3	<ul style="list-style-type: none"> <li>• Uses a variety of text features, including audio and visual cues, to locate information</li> <li>• Uses the library's organizational system to locate relevant information</li> <li>• Uses the computer to locate and access information</li> <li>• Accesses information from reference materials</li> </ul>
Select and use strategies to understand and relate information in texts 3.2.4	<ul style="list-style-type: none"> <li>• Select and uses prior knowledge connections, predictions, and inferences to make sense of and relate information within and across text</li> <li>• Selects and uses textual cues and organizational patterns to preview and construct meaning within and across texts</li> <li>• Selects and summarizes key ideas and details from texts related to inquiry topic</li> </ul>

## ELA GRADE 8

**GO #3** Students will listen, speak, read, write, view and represent to plan and focus an inquiry or research and interpret and analyze information and ideas, through a process.

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Organize ideas and information using headings 3.3.1	<ul style="list-style-type: none"> <li>• Explains choice of strategies and graphic organizers to format and organize information</li> </ul>
Record key ideas and details; cite sources appropriately 3.3.2	<ul style="list-style-type: none"> <li>• Explains method of recording ideas and information from one or more sources using categories with headings</li> <li>• Cites sources of information using established criteria</li> </ul>
Explain relevance, importance, perspectives, and gaps in information within and across sources 3.3.3	<ul style="list-style-type: none"> <li>• Explains use of information in terms of relevance to inquiry, importance of information, and currency</li> <li>• Identifies and explains gaps in information</li> <li>• Identifies and compares perspectives within and across texts</li> </ul>
Incorporate new information with prior knowledge and adjust inquiry to reflect changing perspectives 3.3.4	<ul style="list-style-type: none"> <li>• Describes how new information impacts prior knowledge of and perspectives on inquiry topic</li> <li>• Synthesizes information from a variety of sources to explain new understanding(s) and/or point of view about inquiry topic</li> <li>• Makes reasoned judgments related to new understandings supported by evidence</li> <li>• Generates goals for next steps in inquiry or research process</li> </ul>

**GO #4** Students will listen, speak, read, write, view and represent to clarify and enhance oral, written, and visual forms of communication, through a process.

Generate ideas and develop a topic using a variety of strategies 4.1.1	<ul style="list-style-type: none"> <li>• Identifies and compares possible ideas from a variety of sources using a variety of strategies</li> <li>• Explains choice of focus from ideas</li> <li>• Synthesizes ideas to develop a topic</li> </ul>
Use appropriate form and genre to organize ideas and information for a particular audience and purpose 4.1.2	<ul style="list-style-type: none"> <li>• Explains choice of form(s) and genre(s) when preparing to create texts</li> <li>• Relates decisions about form and organizational structure to audience and purpose when preparing to create text</li> <li>• Explains choice of organizational structures needed to create texts</li> <li>• Adapts ideas and information, form, and text structures for purpose and audience when preparing to create a text</li> </ul>
Demonstrate understanding of elements of texts when creating oral, print, and other media texts 4.1.3	<ul style="list-style-type: none"> <li>• Creates original narrative texts, applying familiar narrative forms</li> <li>• Applies understanding of elements of narrative texts when creating texts</li> <li>• Creates original expository texts, applying familiar expository forms</li> <li>• Applies understanding of elements of expository texts when creating texts</li> <li>• Creates original poetic texts, applying familiar poetic forms</li> <li>• Applies understanding of elements of poetic texts when creating</li> <li>• Creates texts using a computer</li> </ul>
Reference criteria during conversations about own and others' texts and representations 4.2.1 <i>*The <a href="#">criteria to guide the focussed conversations</a> is based on <a href="#">Techniques, Elements and/or Content</a>(Distinction between grades is <a href="#">depth of focussed conversations</a>)</i>	<ul style="list-style-type: none"> <li>• Participates in development and revision of criteria for a variety of texts and representations</li> <li>• References criteria when suggesting revisions for own and others' draft texts and representations</li> <li>• References criteria when requesting feedback for draft texts/representations</li> </ul>



## ELA GRADE 8

**GO #4** Students will listen, speak, read, write, view and represent to clarify and enhance oral, written, and visual forms of communication, through a process.

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Revise ideas and organizational structures to meet criteria 4.2.2	<ul style="list-style-type: none"> <li>• Uses criteria to select specific aspects of text to revise based on own /others' feedback and criteria</li> <li>• Explains effect of revisions</li> <li>• Compares revised text to criteria and repeats a personal revision process as needed</li> </ul>
Develop fluency and proficiency with keyboarding and word processing 4.2.3	<ul style="list-style-type: none"> <li>• Develops proficiency with keyboarding and word processing when composing, revising, formatting, and publishing texts</li> <li>• Develops an expanding repertoire of vocabulary associated with keyboarding and word processing</li> </ul>
Experiment with language to create desired effect in oral, print, and other media text 4.2.4	<ul style="list-style-type: none"> <li>• Choose/uses descriptive and figurative language to develop ideas and create effects</li> <li>• Chooses and uses vocabulary to develop ideas and create desired effects, sometimes taking risks with new words</li> <li>• Uses a variety of sentence lengths and structures to develop ideas and create effects</li> <li>• Uses a voice that is individual, expressive, and engaging with an awareness of and respect for the audience and intended purpose</li> </ul>
Use an editing process to enhance communication 4.3.1	<ul style="list-style-type: none"> <li>• Uses an editing process, with guidance, to identify grammar and usage problems that impact meaning (<b>add: appropriate tone, eliminate misplaced modifiers</b>)</li> <li>• Discusses the function of the parts of speech in a sentence</li> </ul>
Apply spelling conventions to texts using a variety of strategies and resources 4.3.2	<ul style="list-style-type: none"> <li>• Spells most words conventionally so that errors do not interfere with communication</li> <li>• Uses a variety of strategies and resources when spelling unfamiliar words</li> <li>• Uses an editing process to check and correct spelling</li> </ul>
Use an editing process to check for punctuation and capitalization 4.3.3	<ul style="list-style-type: none"> <li>• Capitalizes most words conventionally so that errors do not interfere with communication</li> <li>• Applies rules for punctuation correctly in most writing so that errors do not interfere with communication</li> <li>• Uses an editing process to check and correct capitalization and punctuation</li> <li>• Edits for punctuation and capitalization with computer</li> </ul>
Present and/or publish texts (oral, print, and media) 4.4.1	<ul style="list-style-type: none"> <li>• Uses a variety of techniques to engage audience and present texts effectively</li> <li>• Experiments with media to enhance presentations</li> <li>• Evaluates the effectiveness of presentation of texts on audience</li> </ul>

## ELA GRADE 8

**GO #5** Students will listen, speak, read, write, view and represent to celebrate and build community within the home, school, workplace and wider society.

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Make decisions collaboratively to modify or create group processes for specific purposes, in order to work in a variety of partnerships and groups 5.1.1	<ul style="list-style-type: none"> <li>• Modifies or creates group processes when collaborating with peers to accomplish a specific task (add: <b>advocate points of view that recognize the ideas of others to advance the thinking of the group, use opportunities as a group member to contribute to group goals and to extend own learning</b>)</li> <li>• Discusses, creates and selects appropriate roles for small/whole group task(s)</li> </ul>
Adjust listening, viewing, speaking behaviours according to the situation 5.1.2	<ul style="list-style-type: none"> <li>• Speaks, listens, views respectfully &amp; critically (add: <b>ask probing or challenging questions, explain responses and opinions in detail</b>)</li> <li>• Adjusts language to fit context (audience, purpose &amp; situation) &amp; explains choices</li> <li>• Discusses and explores features of language in a variety of school and community contexts</li> </ul>
Evaluate the quality of own contributions to group processes and set goals and plans for development 5.1.3 <i>the distinction between grade levels is in the sophistication of assessment tools and strategies that guide the reflections)</i>	<ul style="list-style-type: none"> <li>• Participates in the development of criteria to evaluate group processes</li> <li>• Assesses the effectiveness of the group process using set criteria</li> <li>• Reflects on personal behaviours and learning style</li> <li>• Reflects on personal behaviours that contribute to group success to set personal goals</li> <li>• Applies peer and/or group feedback about group process and personal actions in the group</li> </ul>
Compare personal reactions to and ways of thinking about a variety of experiences and texts with those of others 5.2.1	<ul style="list-style-type: none"> <li>• Recognizes and appreciates differing perspectives of common experiences</li> <li>• Summarizes and compares own and or others' responses</li> <li>• Offers feedback on ways others communicate ideas</li> </ul>
Identify and describe social issues related to diversity 5.2.2	<ul style="list-style-type: none"> <li>• Shows respect of others' talents, strengths, interests, feelings and ideas to strengthen the community</li> <li>• Expresses and explores own identity through talents, strengths, interests, feelings and ideas</li> <li>• Discusses issues of diversity beyond the local community, including unethical positions and bias</li> <li>• Identifies some perspectives on diversity that may be missing or not represented</li> </ul>
Select and use context-appropriate language and form to participate in public events or traditions 5.2.3	<ul style="list-style-type: none"> <li>• Explains how context influences the selection of suitable language and form to honour and celebrate others in public events or traditions</li> <li>• Explains selection and use of language and form in plans to celebrate others, special events or accomplishments</li> <li>• Recognizes the value of own and others' contribution to many communities</li> </ul>

## MATH GRADE 8

**Strand:** Number

**General Outcome:** Develop number sense

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators may be used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
1. Demonstrate an understanding of perfect square and square root, concretely, pictorially and symbolically (limited to whole numbers). [C, CN, R, V]	<ul style="list-style-type: none"> <li>• Represent a given perfect square as a square region using materials, such as grid paper or square shapes.</li> <li>• Determine the factors of a given perfect square, and explain why one of the factors is the square root and the others are not.</li> <li>• Determine whether or not a given number is a perfect square using materials and strategies, such as square shapes, grid paper or prime factorization, and explain the reasoning.</li> <li>• Determine the square root of a given perfect square and record it symbolically.</li> <li>• Determine the square of a given number.</li> </ul>
2. Determine the approximate square root of numbers that are not perfect squares (limited to whole numbers). [C, CN, ME, R, T]	<ul style="list-style-type: none"> <li>• Estimate the square root of a given number that is not a perfect square using the roots of perfect squares as benchmarks.</li> <li>• Approximate the square root of a given number that is not a perfect square using technology, e.g., calculator, computer.</li> <li>• Explain why the square root of a number shown on a calculator may be an approximation.</li> <li>• Identify a number with a square root that is between two given numbers.</li> </ul>
3. Demonstrate an understanding of percents greater than or equal to 0%. [CN, PS, R, V]	<ul style="list-style-type: none"> <li>• Provide a context where a percent may be more than 100% or between 0% and 1%.</li> <li>• Represent a given fractional percent using grid paper.</li> <li>• Represent a given percent greater than 100 using grid paper.</li> <li>• Determine the percent represented by a given shaded region on a grid, and record it in decimal, fractional and percent form.</li> <li>• Express a given percent in decimal or fractional form.</li> <li>• Express a given decimal in percent or fractional form.</li> <li>• Express a given fraction in decimal or percent form.</li> <li>• Solve a given problem involving percents.</li> <li>• Solve a given problem involving combined percents, e.g., addition of percents, such as GST + PST.</li> <li>• Solve a given problem that involves finding the percent of a percent, e.g., A population increased by 10% one year and then increased by 15% the next year. Explain why there was not a 25% increase in population over the two years.</li> </ul>
4. Demonstrate an understanding of ratio and rate. [C, CN, V]	<ul style="list-style-type: none"> <li>• Express a two-term ratio from a given context in the forms 3:5 or 3 to 5.</li> <li>• Express a three-term ratio from a given context in the forms 4:7:3 or 4 to 7 to 3.</li> <li>• Express a part to part ratio as a part to whole fraction, e.g., frozen juice to water; 1 can concentrate to 4 cans of water can be represented as <math>\frac{1}{5}</math>, which is the ratio of concentrate to solution, or <math>\frac{4}{5} \frac{a}{b}</math>, which is the ratio of water to solution.</li> <li>• Identify and describe ratios and rates from real-life examples, and record them symbolically.</li> <li>• Express a given rate using words or symbols, e.g., 20 L per 100 km or 20 L/100 km.</li> <li>• Express a given ratio as a percent and explain why a rate cannot be represented as a percent.</li> </ul>

## MATH GRADE 8

**Strand:** Number

**General Outcome:** Develop number sense

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators may be used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
5. Solve problems that involve rates, ratios and proportional reasoning. [C, CN, PS, R]	<ul style="list-style-type: none"> <li>• Explain the meaning of <math>\frac{a}{b}</math> within a given context.</li> <li>• Provide a context in which <math>\frac{a}{b}</math> b represents a:               <ul style="list-style-type: none"> <li>○ Fraction</li> <li>○ Rate</li> <li>○ Ratio</li> <li>○ Quotient</li> <li>○ Probability.</li> </ul> </li> <li>• Solve a given problem involving rate, ratio or percent.</li> </ul>
6. Demonstrate an understanding of multiplying and dividing positive fractions and mixed numbers, concretely, pictorially and symbolically. [C, CN, ME, PS]	<ul style="list-style-type: none"> <li>• Identify the operation required to solve a given problem involving positive fractions.</li> <li>• Provide a context that requires the multiplying of two given positive fractions.</li> <li>• Provide a context that requires the dividing of two given positive fractions.</li> <li>• Estimate the product of two given positive proper fractions to determine if the product will be closer to 0, <math>\frac{1}{2}</math> or 1.</li> <li>• Estimate the quotient of two given positive fractions and compare the estimate to whole number benchmarks.</li> <li>• Express a given positive mixed number as an improper fraction and a given positive improper fraction as a mixed number.</li> <li>• Model multiplication of a positive fraction by a whole number concretely or pictorially and record the process.</li> <li>• Model multiplication of a positive fraction by a positive fraction concretely or pictorially using an area model and record the process.</li> <li>• Model division of a positive proper fraction by a whole number concretely or pictorially and record the process.</li> <li>• Model division of a positive proper fraction by a positive proper fraction pictorially and record the process.</li> <li>• Generalize and apply rules for multiplying and dividing positive fractions, including mixed numbers.</li> <li>• Solve a given problem involving positive fractions taking into consideration order of operations (limited to problems with positive solutions).</li> </ul>
7. Demonstrate an understanding of multiplication and division of integers, concretely, pictorially and symbolically. [C, CN, PS, R, V]	<ul style="list-style-type: none"> <li>• Identify the operation required to solve a given problem involving integers.</li> <li>• Provide a context that requires multiplying two integers.</li> <li>• Provide a context that requires dividing two integers.</li> <li>• Model the process of multiplying two integers using concrete materials or pictorial representations and record the process.</li> <li>• Model the process of dividing an integer by an integer using concrete materials or pictorial representations and record the process.</li> <li>• Solve a given problem involving the multiplication of integers (2-digit by 2-digit) without the use of technology.</li> <li>• Solve a given problem involving the division of integers (2-digit by 2-digit) without the use of technology.</li> </ul>

## MATH GRADE 8

### Strand: Number

**General Outcome:** Develop number sense

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators may be used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
(Continued)	<ul style="list-style-type: none"> <li>• Generalize and apply a rule for determining the sign of the product and quotient of integers.</li> <li>• Solve a given problem involving integers taking into consideration order of operations.</li> </ul>

### Strand: Patterns and Relations (Patterns)

**General Outcome:** Use patterns to describe the world and solve problems

1. Graph and analyze two-variable linear relations. [C, ME, PS, R, T, V]	<ul style="list-style-type: none"> <li>• Determine the missing value in an ordered pair for a given equation.</li> <li>• Create a table of values by substituting values for a variable in the equation of a given linear relation.</li> <li>• Construct a graph from the equation of a given linear relation (limited to discrete data).</li> <li>• Describe the relationship between the variables of a given graph.</li> </ul>
2. Model and solve problems using linear equations of the form: <ul style="list-style-type: none"> <li>• <math>ax = b</math></li> <li>• <math>\frac{x}{a} = b, a \neq 0</math></li> <li>• <math>ax + b = c</math></li> <li>• <math>\frac{x}{a} + b = c, a \neq 0</math></li> <li>• <math>a(x + b) = c</math></li> </ul> Concretely, pictorially and symbolically, where $a, b$ and $c$ are integers. [C, CN, PS, V]	<ul style="list-style-type: none"> <li>• Model a given problem with a linear equation and solve the equation using concrete models, e.g., counters, integer tiles.</li> <li>• Verify the solution to a given linear equation using a variety of methods, including concrete materials, diagrams and substitution.</li> <li>• Draw a visual representation of the steps used to solve a given linear equation and record each step symbolically.</li> <li>• Solve a given linear equation symbolically.</li> <li>• Identify and correct an error in a given incorrect solution of a linear equation.</li> <li>• Apply the distributive property to solve a given linear equation, e.g., <math>2(x + 3) = 5; 2x + 6 = 5; \dots</math></li> <li>• Solve a given problem using a linear equation and record the process.</li> </ul>

### Strand: Shape and Space (Measurement)

**General Outcome:** Use direct or indirect measurement to solve problems.

1. Develop and apply the Pythagorean theorem to solve problems. [CN, PS, R, T, V]	<ul style="list-style-type: none"> <li>• Model and explain the Pythagorean theorem concretely, pictorially or using technology.</li> <li>• Explain, using examples, that the Pythagorean theorem applies only to right triangles.</li> <li>• Determine whether or not a given triangle is a right triangle by applying the Pythagorean theorem.</li> <li>• Determine the measure of the third side of a right triangle, given the measures of the other two sides, to solve a given problem.</li> <li>• Solve a given problem that involves Pythagorean triples, e.g., 3, 4, 5 or 5, 12, 13.</li> </ul>
2. Draw and construct nets for 3-D objects. [C, CN, PS, V]	<ul style="list-style-type: none"> <li>• Match a given net to the 3-D object it represents.</li> <li>• Construct a 3-D object from a given net.</li> <li>• Draw nets for a given right circular cylinder, right rectangular prism and right triangular prism, and verify by constructing the 3-D objects from the nets.</li> <li>• Predict 3-D objects that can be created from a given net and verify the prediction.</li> </ul>
3. Determine the surface area of: <ul style="list-style-type: none"> <li>• right rectangular prisms</li> <li>• right triangular prisms</li> <li>• right cylinders</li> </ul> To solve problems. [C, CN, PS, R, V]	<ul style="list-style-type: none"> <li>• Explain, using examples, the relationship between the area of 2-D shapes and the surface area of a given 3-D object.</li> <li>• Identify all the faces of a given prism, including right rectangular and right triangular prisms.</li> </ul>

## MATH GRADE 8

### Strand: Shape and Space (Measurement)

**General Outcome:** Use direct or indirect measurement to solve problems.

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators may be used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
(Continued)	<ul style="list-style-type: none"> <li>• Describe and apply strategies for determining the surface area of a given right rectangular or right triangular prism.</li> <li>• Describe and apply strategies for determining the surface area of a given right cylinder.</li> <li>• Solve a given problem involving surface area.</li> </ul>
4. Develop and apply formulas for determining the volume of right prisms and right cylinders. [C, CN, PS, R, V]	<ul style="list-style-type: none"> <li>• Determine the volume of a given right prism, given the area of the base.</li> <li>• Generalize and apply a rule for determining the volume of right cylinders.</li> <li>• Explain the connection between the area of the base of a given right 3-D object and the formula for the volume of the object.</li> <li>• Demonstrate that the orientation of a given 3-D object does not affect its volume.</li> <li>• Apply a formula to solve a given problem involving the volume of a right cylinder or a right prism.</li> </ul>

### Strand: Shape and Space (3-D Objects and 2-D Shapes)

**General Outcome:** Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

5. Draw and interpret top, front and side views of 3-D objects composed of right rectangular prisms. [C, CN, R, T, V]	<ul style="list-style-type: none"> <li>• Draw and label the top, front and side views for a given 3-D object on isometric dot paper.</li> <li>• Compare different views of a given 3-D object to the object.</li> <li>• Predict the top, front and side views that will result from a described rotation (limited to multiples of 90 degrees) and verify predictions.</li> <li>• Draw and label the top, front and side views that result from a given rotation (limited to multiples of 90 degrees).</li> <li>• Build a 3-D block object, given the top, front and side views, with or without the use of technology.</li> <li>• Sketch and label the top, front and side views of a 3-D object in the environment with or without the use of technology.</li> </ul>
6. Demonstrate an understanding of tessellation by: <ul style="list-style-type: none"> <li>• explaining the properties of shapes that make Tessellating possible</li> <li>• creating tessellations</li> <li>• identifying tessellations in the environment. [C, CN, PS, T, V]</li> </ul>	<ul style="list-style-type: none"> <li>• Identify, in a given set of regular polygons, those shapes and combinations of shapes that will tessellate, and use angle measurements to justify choices, e.g., squares, regular n-gons.</li> <li>• Identify, in a given set of irregular polygons, those shapes and combinations of shapes that will tessellate, and use angle measurements to justify choices.</li> <li>• Identify a translation, reflection or rotation in a given tessellation.</li> <li>• Identify a combination of transformations in a given tessellation.</li> <li>• Create a tessellation using one or more 2-D shapes, and describe the tessellation in terms of transformations and conservation of area.</li> <li>• Create a new tessellating shape (polygon or non-polygon) by transforming a portion of a given tessellating polygon, e.g., one by M. C. Escher, and describe the resulting tessellation in terms of transformations and conservation of area.</li> <li>• Identify and describe tessellations in the environment.</li> </ul>

## MATH GRADE 8

### Strand: Statistics and Probability (Data Analysis)

**General Outcome:** Collect, display and analyze data to solve problems

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators may be used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
1. Critique ways in which data is presented. [C, R, T, V]	<ul style="list-style-type: none"> <li>• Compare the information that is provided for the same data set by a given set of graphs, including circle graphs, line graphs, bar graphs, double bar graphs and pictographs, to determine the strengths and limitations of each graph.</li> <li>• Identify the advantages and disadvantages of different graphs, including circle graphs, line graphs, bar graphs, double bar graphs and pictographs, in representing a specific given set of data.</li> <li>• Justify the choice of a graphical representation for a given situation and its corresponding data set.</li> <li>• Explain how the format of a given graph, such as the size of the intervals, the width of bars and the visual representation, may lead to misinterpretation of the data.</li> <li>• Explain how a given formatting choice could misrepresent the data.</li> <li>• Identify conclusions that are inconsistent with a given data set or graph and explain the misinterpretation.</li> </ul>
<b>Strand: Statistics and Probability (Chance and Uncertainty)</b> <b>General Outcome:</b> Collect, display and analyze data to solve problems	
2. Solve problems involving the probability of independent events.[C, CN, PS, T]	<ul style="list-style-type: none"> <li>• Determine the probability of two given independent events and verify the probability using a different strategy.</li> <li>• Generalize and apply a rule for determining the probability of independent events.</li> <li>• Solve a given problem that involves determining the probability of independent events.</li> </ul>

## SCIENCE GRADE 8

### Attitude Outcomes: common to all units

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Interest in Science:</b> Students will be encouraged to develop enthusiasm and continuing interest in the study of science.	<ul style="list-style-type: none"> <li>• Show interest in science-related questions and issues, and pursue personal interests and career possibilities within science-related fields.</li> </ul>
<b>Mutual Respect:</b> Students will be encouraged to appreciate that scientific understanding evolves from the interaction of ideas involving people with different views and backgrounds.	<ul style="list-style-type: none"> <li>• Appreciate that scientific understanding evolves from the interaction of ideas involving people with different views and backgrounds</li> </ul>
<b>Scientific Inquiry:</b> Students will be encouraged to develop attitudes that support active inquiry, problem solving and decision making.	<ul style="list-style-type: none"> <li>• Seek and apply evidence when evaluating alternative approaches to investigations, problems and issues.</li> </ul>
<b>Collaboration:</b> Students will be encouraged to develop attitudes that support collaborative activity.	<ul style="list-style-type: none"> <li>• Work collaboratively in carrying out investigations and in generating and evaluating ideas.</li> </ul>
<b>Stewardship:</b> Students will be encouraged to develop responsibility in the application of science and technology in relation to society and the natural environment.	<ul style="list-style-type: none"> <li>• Demonstrate sensitivity and responsibility in pursuing a balance between the needs of humans and a sustainable environment.</li> </ul>
<b>Safety:</b> Students will be encouraged to demonstrate a concern for safety in science and technology contexts	<ul style="list-style-type: none"> <li>• Show concern for safety in planning, carrying out and reviewing activities</li> </ul>
<b>Mix and Flow of Matter</b> <b>Essential Questions:</b> What are fluids? What are they made of? How do we use them? What properties of fluids are important to their use?	
Investigate and describe fluids used in technological devices and everyday material	<ul style="list-style-type: none"> <li>• Investigate and identify fluids in household materials, technological devices, living things and natural environments</li> <li>• Explain the WHMIS symbols for labelling substances; and describe the safety precautions when handling, storing and disposing of substances at home and in the lab</li> <li>• Describe examples in which materials are prepared are fluids in order to facilitate transportation, processing or use</li> <li>• Identify properties of fluids that are important to their selection and use</li> </ul>
Investigate and describe the composition of fluids and interpret the behaviour of materials in solutions	<ul style="list-style-type: none"> <li>• Distinguish among pure substances, mixtures and solutions using common examples</li> <li>• Investigate the solubility of different materials and describe their concentration</li> <li>• Investigate and identify factors that affect solubility and the rate of dissolving a solute in a solvent</li> <li>• Relate the properties of mixtures and solutions to the particle model of matter</li> </ul>
Investigate and compare the properties of gases and liquids; and relate variations in their viscosity, density, buoyancy and compressibility to the particle model of matter	<ul style="list-style-type: none"> <li>• Investigate and compare fluids based on their viscosity and flow rate, and describe the effects of temperature change on liquid flow</li> <li>• Observe the mass and volume of liquid and calculate the density using the formula <math>d=m/v</math></li> <li>• Compare densities of materials; explain the differences in the density of solids, liquids and gases using the particle model of matter</li> </ul>



## SCIENCE GRADE 8

### Mix and Flow of Matter

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
(Continued)	<ul style="list-style-type: none"> <li>• Describe methods of altering the density of a fluid, and identify and interpret related practical applications (e.g., describe changes in buoyancy resulting from increasing the concentration of salt in water)</li> <li>• Describe pressure as a force per unit area by using the formula <math>p = F/A</math>, and describe applications of pressure in fluids and everyday situations</li> <li>• Investigate and compare the compressibility of liquids and gases</li> </ul>
Identify, interpret and apply technologies based on properties of fluids	<ul style="list-style-type: none"> <li>• Describe technologies based on the solubility of materials</li> <li>• Describe and interpret technologies based on flow rate and viscosity</li> <li>• Describe and interpret technologies for moving fluids from one place to another</li> <li>• Construct a device that uses the transfer of fluids to apply a force or to control motion</li> </ul>
<b>Skills Outcomes</b>	
<b>Initiating and Planning:</b> Ask questions about the relationships between and among observable variables, and plan investigations to address those questions	<ul style="list-style-type: none"> <li>• Define practical problems</li> <li>• Identify questions to investigate, arising from practical problems and issues</li> <li>• Phrase questions in a testable form, and clearly define practical problems</li> <li>• Design an experiment, and identify the major variables</li> </ul>
<b>Performing and Recording:</b> Conduct investigations into the relationships between and among observations, and gather and record qualitative and quantitative data	<ul style="list-style-type: none"> <li>• Carry out procedures, controlling the major variables</li> <li>• Use instruments effectively and accurately for collecting data</li> <li>• Construct and test prototype designs and systems</li> <li>• Use tools and apparatus safely</li> <li>• Organize data, using a format that is appropriate to the task or experiment</li> </ul>
<b>Analyzing and Interpreting:</b> Analyze qualitative and quantitative data, and develop and assess possible explanations	<ul style="list-style-type: none"> <li>• Identify and suggest explanations for discrepancies in data</li> <li>• Predict the value of a variable, by interpolating or extrapolating from graphical data</li> <li>• Identify new questions and problems that arise from what was learned</li> <li>• Identify and evaluate potential applications of finding</li> </ul>
<b>Communication and Teamwork:</b> Work collaboratively on problems; and use appropriate language and formats to communicate ideas, procedures and results	<ul style="list-style-type: none"> <li>• Identify and correct practical problems in the way a prototype or constructed device functions</li> <li>• Work cooperatively with team members to develop and carry out a plan, and troubleshoot problems as they arise</li> <li>• Communicate questions, ideas, intentions, plans and results, using lists, notes in point form, sentences, data tables, graphs, drawings, oral language and other means</li> </ul>
<b>Cells and Systems</b>	
<b>Essential Questions:</b>	
How can we make sense of the vast diversity of living things?	
What do living things have in common—from the smallest to the largest—and what variations do we find in the structure and function of living things?	
Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization	<ul style="list-style-type: none"> <li>• Investigate and describe example scientific studies of the characteristics of living things</li> <li>• Apply the concept of system in describing familiar organisms and analyzing their general structure and function</li> <li>• Illustrate and explain how different organisms have similar functions that are met in a variety of ways</li> </ul>
Investigate and describe the role of cells within living things	<ul style="list-style-type: none"> <li>• Describe the role of cells as a basic unit of life</li> <li>• Analyze similarities and differences between single-celled and multicelled organisms</li> </ul>

## SCIENCE GRADE 8

### Cells and Systems

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
(Continued)	<ul style="list-style-type: none"> <li>• Distinguish between plant and animal cells</li> <li>• Describe the movement of gases and liquids into and out of cells during diffusion and osmosis, based on concentration differences</li> <li>• Examine plant and animal structures; and identify contributing roles of cells, tissues and organ</li> </ul>
Interpret the healthy function of human body systems, and illustrate ways the body reacts to internal and external stimuli	<ul style="list-style-type: none"> <li>• Describe, in general terms, body systems for respiration, circulation, digestion, excretion and sensory awareness</li> <li>• Describe, in general terms, the role of individual organs and tissues in supporting the healthy functioning of the human body</li> <li>• Describe ways in which various types of cells contribute to the healthy functioning of the human body</li> <li>• Describe changes in body functions in response to changing conditions</li> </ul>
Describe areas of scientific investigation leading to new knowledge about body systems and to new medical application	<ul style="list-style-type: none"> <li>• Identify examples of research into functions and dysfunctions of human cells, organs or body systems</li> <li>• Describe ways in which research about cells, organs and systems has brought about improvements in human health and nutrition</li> <li>• Investigate and describe factors that affect the healthy function of the human respiratory, circulatory and digestive systems</li> </ul>
<b>Skills Outcomes</b>	
<b>Initiating and Planning:</b> Ask questions about the relationships between and among observable variables, and plan investigations to address those questions	<ul style="list-style-type: none"> <li>• Identify questions to investigate</li> <li>• Rephrase questions in a testable form</li> <li>• Formulate operational definitions of major variables and other aspects of their investigations</li> </ul>
<b>Performing and Recording:</b> Conduct investigations into the relationships between and among observations, and gather and record qualitative and quantitative data	<ul style="list-style-type: none"> <li>• Use instruments—including microscopes—effectively and accurately for collecting data</li> <li>• Estimate measurements observe and record data, and produce simple line drawings</li> <li>• Organize data, using a format that is appropriate to the task or experiment</li> </ul>
<b>Analyzing and Interpreting:</b> Analyze qualitative and quantitative data, and develop and assess possible explanations	<ul style="list-style-type: none"> <li>• Identify strengths and weaknesses of different methods of collecting and displaying data</li> <li>• Identify and suggest explanations for discrepancies in data</li> <li>• Compile and display data, by hand or computer, in a variety of formats, including diagrams, flow charts, tables, bar graphs and line graphs</li> <li>• Identify new questions and problems that arise from what was learned</li> </ul>
<b>Communication and Teamwork:</b> Work collaboratively on problems; and use appropriate language and formats to communicate ideas, procedures and results	<ul style="list-style-type: none"> <li>• Receive, understand and act on the ideas of others</li> <li>• Communicate questions, ideas, intentions, plans and results, using lists, notes in point form, sentences, data tables, graphs, drawings, oral language and other means</li> <li>• Work cooperatively with team members to develop and carry out a plan</li> <li>• Evaluate individual and group processes used in planning, problem solving, decision making and completing a task</li> </ul>

## SCIENCE GRADE 8

### Light and Optical Systems

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Essential Questions:</b> What do we know about the nature of light? What technologies have been developed that use light, and what principles of light do they show?	
Investigate the nature of light and vision; and describe the role of invention, explanation and inquiry in developing our current knowledge	<ul style="list-style-type: none"> <li>• Identify challenges in explaining the nature of light and vision</li> <li>• Investigate the development of microscopes, telescopes and other optical devices; and describe how these developments contributed to the study of light and other areas of science</li> <li>• Investigate light beams and optical devices, and identify phenomena that provide evidence of the nature of light</li> </ul>
Investigate the transmission of light, and describe its behaviour using a geometric ray mode	<ul style="list-style-type: none"> <li>• Investigate how light is reflected, transmitted and absorbed by different materials; and describe differences in the optical properties of various materials</li> <li>• Measure and predict angles of reflection</li> <li>• Investigate, measure and describe the refraction of light through different materials</li> <li>• Investigate materials used in optical technologies; and predict the effects of changes in their design, alignment or composition</li> </ul>
Investigate and explain the science of image formation and vision, and interpret related technologies	<ul style="list-style-type: none"> <li>• Demonstrate the formation of real images, using a double convex lens, and predict the effects of changes in the lens position on the size and location of images</li> <li>• Demonstrate and explain the use of microscopes; and describe, in general terms, the function of eyeglasses, binoculars and telescopes</li> <li>• Explain how objects are seen by the eye, and compare eyes with cameras</li> <li>• Compare the function and design of the mammalian eye with that of other vertebrates and invertebrates</li> <li>• Investigate and describe the development of new technologies to enhance human vision</li> <li>• Investigate and interpret emerging technologies for storing and transmitting images in digital form</li> </ul>
<b>Skills Outcomes</b>	
<b>Initiating and Planning:</b> Ask questions about the relationships between and among observable variables, and plan investigations to address those questions	<ul style="list-style-type: none"> <li>• Identify questions to investigate</li> <li>• Define and delimit questions to facilitate investigation</li> <li>• Design an experiment, and identify the major variables</li> <li>• State a prediction and a hypothesis based on background information or an observed pattern of events</li> <li>• Formulate operational definitions of major variables and other aspects of their investigations</li> </ul>
<b>Performing and Recording:</b> Conduct investigations into the relationships between and among observations, and gather and record qualitative and quantitative data	<ul style="list-style-type: none"> <li>• Carry out procedures, controlling the major variables</li> <li>• Observe and record data, and prepare simple line drawings</li> <li>• Use instruments effectively and accurately for collecting data</li> <li>• Organize data, using a format that is appropriate to the task or experiment use tools and apparatus safely</li> </ul>
<b>Analyzing and Interpreting:</b> Analyze qualitative and quantitative data, and develop and assess possible explanations	<ul style="list-style-type: none"> <li>• Predict the value of a variable by interpolating or extrapolating from graphical data</li> <li>• Identify strengths and weaknesses of different ways of collecting and displaying data</li> <li>• State a conclusion, based on experimental data, and explain how evidence gathered supports or refutes an initial idea</li> <li>• Identify new questions and problems that arise from what was learned</li> </ul>

## SCIENCE GRADE 8

### Light and Optical Systems

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Communication and Teamwork:</b> Work collaboratively on problems; and use appropriate language and formats to communicate ideas, procedures and results	<ul style="list-style-type: none"> <li>• Receive, understand and act on the ideas of others</li> <li>• Recommend an appropriate way of summarizing and interpreting their findings</li> </ul>
<b>Mechanical Systems</b> <b>Essential Questions:</b> How is energy transferred in mechanical devices? How do mechanical devices provide for controlled application of energy in ways that are efficient, effective and responsible?	
Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time	<ul style="list-style-type: none"> <li>• Investigate and provide examples of mechanical devices used in the past to meet particular needs</li> <li>• Illustrate how a common need has been met in different ways over time</li> <li>• Illustrate how trial and error and scientific knowledge both play a role in technological development</li> </ul>
Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts	<ul style="list-style-type: none"> <li>• Analyze a mechanical device, by:               <ul style="list-style-type: none"> <li>○ Describing the overall function of the device</li> <li>○ Describing the contribution of individual components or subsystems to the overall function of the device</li> <li>○ Identifying components that operate as simple machines</li> </ul> </li> <li>• Identify the source of energy for some familiar mechanical devices</li> <li>• Identify linkages and power transmissions in a mechanical device, and describe their general function</li> </ul>
Investigate and describe the transmission of force and energy between parts of a mechanical system	<ul style="list-style-type: none"> <li>• Analyze mechanical devices to determine speed ratios and force ratios</li> <li>• Build or modify a model mechanical system to provide for different turning ratios between a driving and driven shaft, or to achieve a given force ratio</li> <li>• Compare theoretical and actual values of force ratios, and propose explanations for discrepancies (e.g., identify frictional forces, and estimate their effect on efficiency)</li> <li>• Identify work input and work output in joules for a simple machine or mechanical system (e.g., use a device to lift a measured mass an identified distance, then calculate the work output)</li> <li>• Describe fluid pressure qualitatively and quantitatively, by explaining how forces are transferred in all directions, describing pressure in units of force per unit area</li> <li>• Describe how hydraulic pressure can be used to create a mechanical advantage in a simple hydraulic jack</li> <li>• Describe and interpret technologies based on hydraulics and pneumatics</li> </ul>
Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	<ul style="list-style-type: none"> <li>• Evaluate the design and function of a mechanical device in relation to its efficiency and effectiveness, and identify its impacts on humans and the environment</li> <li>• Develop and apply a set of criteria for evaluating a given mechanical device, and defend those criteria in terms of relevance to social and environmental needs</li> <li>• Illustrate how technological development is influenced by advances in science, and by changes in society and the environment</li> </ul>
<b>Skills Outcomes</b>	
<b>Initiating and Planning:</b> Ask questions about the relationships between and among observable variables, and plan investigations to address those questions	<ul style="list-style-type: none"> <li>• Identify practical problems</li> <li>• Identify questions to investigate arising from practical problems</li> <li>• Propose alternative solutions to a practical problem, select one, and develop a plan</li> <li>• Select appropriate methods and tools for collecting data to solve problems</li> </ul>

## SCIENCE GRADE 8

### Mechanical Systems

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
(Continued)	<ul style="list-style-type: none"> <li>• Formulate operational definitions of major variables and other aspects of their investigations</li> </ul>
<b>Performing and Recording:</b> Conduct investigations into the relationships between and among observations, and gather and record qualitative and quantitative data	<ul style="list-style-type: none"> <li>• Research information relevant to a given problem</li> <li>• Select and integrate information from various print and electronic sources or from several parts of the same source</li> <li>• Construct and test prototype designs and systems</li> <li>• Carry out procedures, controlling the major variables</li> <li>• Organize data, using a format that is appropriate to the task or experiment</li> <li>• Use tools and apparatus safely</li> </ul>
<b>Analyzing and Interpreting:</b> Analyze qualitative and quantitative data, and develop and assess possible explanations	<ul style="list-style-type: none"> <li>• Identify and correct practical problems in the way a prototype or constructed device functions</li> <li>• Evaluate designs and prototypes in terms of function, reliability, safety, efficiency, use of materials and impact on the environment</li> <li>• Identify and evaluate potential applications of findings</li> </ul>
<b>Communication and Teamwork:</b> Work collaboratively on problems; and use appropriate language and formats to communicate ideas, procedures and results	<ul style="list-style-type: none"> <li>• Use specific language that is scientifically and technologically appropriate</li> <li>• Communicate practical problems, plans and results in a variety of ways, using written and oral language, data tables, graphs, drawings and other means</li> <li>• Work cooperatively with team members to develop and carry out a plan, and troubleshoot</li> <li>• Problems as they arise</li> </ul>

### Freshwater and Saltwater Systems

#### Essential Questions:

How do water, land and climate interact?

What are the characteristics of freshwater and saltwater systems, and how do they affect living things, including humans?

Describe the distribution and characteristics of water in local and global environments, and identify the significance of water supply and quality to the needs of humans and other living things	<ul style="list-style-type: none"> <li>• Describe, in general terms, the distribution of water in Alberta, Canada and the world; and interpret information about water characteristics</li> <li>• Recognize that fresh water and salt water contain varying amounts of dissolved materials, particulates and biological components; and interpret information on these component materials</li> <li>• Identify major factors used in determining if water is potable, and describe and demonstrate tests of water quality</li> <li>• Describe, in general terms, methods for generating fresh water from salt water, based</li> </ul>
Investigate and interpret linkages among landforms, water and climate	<ul style="list-style-type: none"> <li>• Describe the processes of erosion and deposition resulting from wave action and water flow, by identifying dissolved solids and sediment loads, and identifying sources and endpoints for these materials; describing how waves and tides are generated and how they interact with shorelines</li> <li>• Investigate and describe stream characteristics</li> <li>• Describe processes leading to the development of ocean basins and continental drainage systems</li> <li>• Identify evidence of glacial action, and analyze factors affecting the growth and attrition of glaciers and polar icecaps</li> <li>• Describe the movement of ocean currents and its impact on regional climates</li> </ul>

## SCIENCE GRADE 8

### Freshwater and Saltwater Systems

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Analyze factors affecting productivity and species distribution in marine and freshwater environments	<ul style="list-style-type: none"> <li>• Investigate life forms found in fresh water and salt water, and identify and interpret examples of adaptations to these environments</li> <li>• Analyze factors that contribute to the development of adaptations in species found in saltwater and freshwater environments</li> <li>• Investigate and interpret examples of seasonal, short-term and long-term change in populations of living things found in aquatic environments</li> <li>• Analyze relationships between water quality and living things, and infer the quality of water based on the diversity of life supported by it</li> </ul>
Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issue	<ul style="list-style-type: none"> <li>• Analyze human water uses, and identify the nature and scope of impacts resulting from different uses</li> <li>• Identify current practices and technologies that affect water quality, evaluate environmental costs and benefits, and identify and evaluate alternatives</li> <li>• Illustrate the role of scientific research in monitoring environments and supporting development of appropriate environmental technologies</li> <li>• Provide examples of problems that cannot be solved using scientific and technological knowledge alone</li> </ul>
<b>Skills Outcomes</b>	
<b>Initiating and Planning:</b> Ask questions about the relationships between and among observable variables, and plan investigations to address those questions	<ul style="list-style-type: none"> <li>• Identify science-related issues and problems</li> <li>• Identify questions to investigate, arising from science-related issues</li> <li>• Select appropriate methods and tools for collecting relevant data and information</li> <li>• Design an experiment, and identify the major variables</li> </ul>
<b>Performing and Recording:</b> Conduct investigations into the relationships between and among observations, and gather and record qualitative and quantitative data	<ul style="list-style-type: none"> <li>• Research information relevant to a given issue</li> <li>• Select and integrate information from various print and electronic sources or from several parts of the same source</li> <li>• Identify strengths and weaknesses of different methods of collecting and displaying data</li> </ul>
<b>Analyzing and Interpreting:</b> Analyze qualitative and quantitative data, and develop and assess possible explanations	<ul style="list-style-type: none"> <li>• Apply given criteria for evaluating evidence and sources of information</li> <li>• Predict the value of a variable, by interpolating or extrapolating from graphical data</li> <li>• Interpret patterns and trends in data, and infer and explain relationships among the variables</li> <li>• Identify new questions and problems arising from what was learned</li> </ul>
<b>Communication and Teamwork:</b> Work collaboratively on problems; and use appropriate language and formats to communicate ideas, procedures and results	<ul style="list-style-type: none"> <li>• Use appropriate vocabulary, including correct science and technology terminology, to communicate ideas, procedures and results</li> <li>• Communicate questions, ideas, intentions, plans and results, using lists, notes in point form, sentences, data tables, graphs, drawings, oral language and other means</li> <li>• Evaluate individual and group processes used in planning, problem solving, decision making and</li> <li>• Completing a task</li> <li>• Defend a given position on an issue, based on their findings</li> </ul>

## SOCIAL STUDIES GRADE 8

### Attitudes (embed throughout all units)

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Acquire and develop skills, attitudes, insights, and become competent in processes that lead to thinking, feeling and acting as knowledgeable, purposeful, and responsible citizens in a rapidly changing society	<ul style="list-style-type: none"> <li>• Respect, tolerance, and understanding toward individuals, groups, and cultures in one’s own community and in other communities (local, regional, territorial, national, global)</li> <li>• Positive and realistic attitudes about one’s self</li> <li>• Positive attitudes about learning</li> <li>• Positive attitudes about democracy, including an appreciation of the rights, privileges, and responsibilities of citizenship</li> <li>• Attitude of responsibility toward the environment and community (local, regional, territorial, national, global)</li> <li>• An appreciation of change as a common feature of life in all societies</li> <li>• An empathy for people who have been significantly impacted by change</li> <li>• An appreciation of the contributions made by past generations to the wellbeing of today’s people</li> <li>• An awareness that developments in technology can raise important issues</li> <li>• An appreciation of the historical context in which issues arise</li> <li>• An appreciation that social issues are complex and may take time to resolve</li> <li>• A habit of critical thinking, analyzing pros and cons</li> <li>• Open-mindedness, delaying judgment until evidence is considered</li> <li>• A habit of making tentative judgments, then remaining open to new evidence</li> <li>• A sensitivity to other points of view, combined with an ability to identify and reject irrational and unethical positions</li> <li>• An appreciation for the way in which knowledge of the past helps people to understand the present and see possibilities for the future</li> <li>• Better understand themselves, their cultural heritage; others cultural heritage</li> <li>• Better understand the nature of social and ecological interdependence</li> <li>• Become aware of, to analyze critically/constructively, the values of their society</li> <li>• Gain cooperation and conflict resolution skills</li> <li>• Interact positively and productively with their physical and social environments</li> <li>• Cope critically/creatively with current social/political phenomena and problems</li> <li>• Make rational decisions so they can take effective action to influence events</li> </ul>

### Processing Skills (embed throughout all units)

Develop skills that help one acquire, evaluate and use information and ideas	<ul style="list-style-type: none"> <li>• Identify possible sources and locations of information (print and non-print as well as knowledgeable individuals)</li> <li>• Create a timeline to show a sequence of historical events</li> <li>• Identify cause and effect relationships in historical world changes</li> <li>• Make notes that outline the main and related ideas from reading, listening and observing</li> <li>• Draw inferences, make generalizations and reach tentative conclusions from evidence about our changing world</li> <li>• Relate past to present in the study of human continuity and change</li> <li>• Venture predictions about the direction of future social change</li> <li>• Identify values underlying various positions taken on an issue</li> <li>• Distinguish between well-founded and ill-founded opinions</li> <li>• Identify fact, opinion, bias and propaganda</li> <li>• Identify the purpose, message and intended audience of visual communications</li> </ul>
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## SOCIAL STUDIES GRADE 8

### Processing Skills (embed throughout all units)

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
(Continued)	<ul style="list-style-type: none"> <li>• Identify and evaluate alternative answers, conclusions, solutions or decisions regarding issues used for inquiry and research</li> <li>• Construct graphs or charts to illustrate changes in society</li> </ul>

### Communication Skills (embed throughout all units)

Develop skills that help one express and present information and ideas	<ul style="list-style-type: none"> <li>• Interpret opinions presented by visual means</li> <li>• Convey thoughts, feelings and information in a speech on an issue</li> <li>• Organize written material under topical headings</li> <li>• Support an opinion with factual information</li> <li>• Prepare and organize questions for an interview</li> <li>• Write an essay on an issue from several points of view and with sensitivity to more than one perspective</li> <li>• Document sources of information and ideas</li> <li>• Prepare and deliver a speech to the class</li> </ul>
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### Participation Skills (embed throughout all units)

Develop skills that help one interact with others	<ul style="list-style-type: none"> <li>• Contribute to a group discussion as a member, recorder, or leader</li> <li>• Observe the courtesies of a group discussion</li> <li>• Express disagreement, yet remain courteous and constructive</li> <li>• Resolve conflict through compromise and cooperation</li> <li>• Present information and explain ideas to others orally</li> <li>• Work independently without supervision</li> <li>• Recognize personal strengths and weaknesses and seek help when required</li> <li>• Understand, evaluate and accept constructive criticism</li> </ul>
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### Ancient Societies

**Essential Question:** What impact did the development of agriculture have on ancient societies?

Describe how the advent on agriculture had a major impact on ancient societies	<ul style="list-style-type: none"> <li>• What factors in ancient times were responsible for promoting the establishment of settlements and the growth of cities?</li> </ul>
Explain significant change in ancient societies took place over long periods of time	<ul style="list-style-type: none"> <li>• What expectations would a child in an ancient (middle) society have with respect to: family responsibilities, education, occupation, place of residency, contact with other people who held different beliefs and values and followed different lifestyles? How have these expectations changed today?</li> </ul>
Identify ways in which government has evolved from the informal small family groupings to the organization and administration of large, pluralistic societies.	<ul style="list-style-type: none"> <li>• What were some similarities and differences in the ways various ancient (middle) societies were organized and governed?</li> <li>• The essential features of various kinds of government</li> </ul>
Explore and explain ways that the style of government has varied throughout history	<ul style="list-style-type: none"> <li>• How had European society changed from ancient to medieval times?</li> </ul>
Describe the various times in history, when groups of individuals such as commoners, slaves, women and minority groups have been subject to governments over which they could exercise no control.	<ul style="list-style-type: none"> <li>• In what ways were each of men, women and children in various ancient (middle) societies free? Restricted?</li> </ul>
Explain ways in which human ingenuity has allowed some populations to live easier, more prosperous and more comfortable lifestyles	<ul style="list-style-type: none"> <li>• What was the level of technology in ancient (middle) societies with regard to: metallurgy, tools, weapons, constructions techniques, agriculture, food storage and preservation, transportation and communication, clothing? What is the level of technology in those areas today?</li> </ul>



## SOCIAL STUDIES GRADE 8

### Ancient Societies

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Describe ways that a change in society often generates social and ethical issues.	<ul style="list-style-type: none"> <li>• How had European society changed from ancient to medieval times?</li> <li>• How has trade and commerce contributed to change in the world throughout human history?</li> <li>• What has been the relative roles of science and religion in human affairs throughout human history?</li> </ul>

### Middle Societies

**Essential Question:** What Impact did industrialization have on people’s lives in middle societies?

Explain ways that the industrial revolution had a major impact on middle societies.	<ul style="list-style-type: none"> <li>• What expectations would a child in an ancient (middle) society have with respect to: family responsibilities, education, occupation, place of residency, and contact with other people who held different beliefs and values and followed different lifestyles? How have these expectations changed today?</li> </ul>
Describe how government has evolved from the informal small family groupings to the organization and administration of large, pluralistic societies.	<ul style="list-style-type: none"> <li>• What were some similarities and differences in the ways various ancient (middle) societies were organized and governed?</li> </ul>
Explain ways that the style of government has varied throughout history	<ul style="list-style-type: none"> <li>• How has trade and commerce contributed to change in the world throughout human history?</li> <li>• The role that world exploration and trade and industrial revolution played in changing middle societies</li> <li>• The essential features of various kinds of government</li> </ul>
Identify various times in history, groups of individuals such as commoners, slaves, women and minority groups have been subject to governments over which they could exercise no control	<ul style="list-style-type: none"> <li>• In what ways were each of men, women and children in various ancient (middle) societies free? Restricted?</li> </ul>
Explain ways in which human ingenuity has allowed some populations to live easier, more prosperous and more comfortable lifestyles	<ul style="list-style-type: none"> <li>• What was the level of technology in ancient (middle) societies with regard to: metallurgy, tools, weapons, constructions techniques, agriculture, food storage and preservation, transportation and communication, clothing? What is the level of technology in those areas today?</li> <li>• The role that science plays in shaping modern societies</li> </ul>
Describe ways that a change in society often generates social and ethical issues.	<ul style="list-style-type: none"> <li>• What were consequences to human life in middle societies of technological advances such as square-rigged galleons, the compass and cross-staff, the printing press, the steam engine?</li> <li>• What has been the relative roles of science and religion in human affairs throughout human history?</li> </ul>

### Modern Societies

**Essential Questions:**

What role has change in transportation and communication played in making the modern world a “global village”?

What effects does rapid change have on individuals and cultures today?

Explain ways in which during modern times, rates of social change are highly accelerated	<ul style="list-style-type: none"> <li>• What expectations would a child in an ancient (middle) society have with respect to: family responsibilities, education, occupation, place of residency, contact with other people who held different beliefs and values and followed different lifestyles? How have these expectations changed today?</li> </ul>
Describe how a revolution in the fields of transportation and communication is having a major impact on modern societies, turning the world into a “global village”	<ul style="list-style-type: none"> <li>• What was the level of technology in ancient (middle) societies with regard to: metallurgy, tools, weapons, constructions techniques, agriculture, food storage and preservation, transportation and communication, clothing? What is the level of technology in those areas today?</li> </ul>

## SOCIAL STUDIES GRADE 8

### Modern Societies

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Describe ways that social revolutions are events that have relatively rapid and long-term impacts on society	<ul style="list-style-type: none"> <li>• Explore and describe the role that transportation and communication technologies play in shaping modern societies</li> </ul>
Describe how the style of government has varied throughout history. Government has evolved from the informal small family groupings to the organization and administration of large, pluralistic societies.	<ul style="list-style-type: none"> <li>• Identify the essential features of various kinds of government</li> </ul>
Identify various times in history, groups of individuals such as commoners, slaves, women and minority groups have been subject to governments over which they could exercise no control	<ul style="list-style-type: none"> <li>• Define and discuss problems and expectations of developing nations</li> </ul>
Explain ways in which human ingenuity has allowed some populations to live easier, more prosperous and more comfortable lifestyles	<ul style="list-style-type: none"> <li>• What are the consequences to modern human life of radio, television, telecommunications, computers, airplanes?</li> <li>• Explore the role that science plays in shaping modern societies</li> </ul>
Change in society often generates social and ethical issues.	<ul style="list-style-type: none"> <li>• How has trade and commerce contributed to change in the world throughout human history?</li> <li>• What has been the relative roles of science and religion in human affairs throughout human history?</li> </ul>
Explain ways that more than ever before, decisions that individuals and societies make can significantly impact other individuals and societies.	<ul style="list-style-type: none"> <li>• What are some of the effects of rapid social change on individual? On family life?</li> </ul>
Explore some movement towards democracy in all parts of the world in the twentieth century	<ul style="list-style-type: none"> <li>• Identify problems and expectations of developing nations</li> </ul>
Explore and describe that levels of freedom and prosperity are not equal for all peoples around the globe.	<ul style="list-style-type: none"> <li>• The main social and ethical issues of the modern age</li> </ul>
<b>Current Events</b>	
Focus on news stories that describe recent archeological and anthropological findings	<ul style="list-style-type: none"> <li>• Discuss and describe conflicts raised by social ethical and gender issues</li> <li>• Explain new technologies and sustainable economic developments</li> <li>• Describe poverty and prosperity of freedom and oppression around the world</li> <li>• Explain/discuss civics through territorial government stories</li> </ul>

## HEALTH GRADE 8

### Mental and Emotional Well-Being

**Big Ideas:** relationships, coping skills, suicide prevention

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Describe ways that people share responsibilities for making groups work	<ul style="list-style-type: none"> <li>• Examine why people form groups</li> <li>• Identify groups in the community to which adults and young people belong</li> <li>• Identify the benefits people derive from these groups</li> <li>• Identify characteristics of effective working groups</li> <li>• Identify the roles and responsibilities of group members</li> </ul>
Describe ways that people can learn to deal effectively with stress in their lives	<ul style="list-style-type: none"> <li>• Define stress</li> <li>• Identify causes of stress</li> <li>• Identify how stress affects the body</li> <li>• Identify specific methods of dealing with stress</li> </ul>
Explore and describe how uncontrolled stress may lead to depression	<ul style="list-style-type: none"> <li>• Define depression</li> <li>• Identify causes of depression</li> <li>• Identify the signals of depression</li> <li>• Identify ways of dealing with depression</li> </ul>
Explore and explain ways in which severe depression may result in suicide	<ul style="list-style-type: none"> <li>• Identify some basic facts relating to suicide</li> <li>• Identify possible indicators of suicide</li> <li>• Identify sources of help in suicide prevention</li> <li>• Identify ways to prevent a suicide attempt</li> </ul>

### Growth and Development

**Big Ideas:** body systems, physical fitness

Describe ways that the skeletal system supports and protects the body and allows for movement	<ul style="list-style-type: none"> <li>• Name and locate the major bones of the skeletal system</li> <li>• Describe the functions of the skeletal system</li> <li>• State the importance of the skeletal system</li> <li>• Identify the types of skeletal joints, their locations and functions</li> <li>• Describe the structures related to a movable joint</li> <li>• Describe common problem conditions related to the skeletal system</li> <li>• Describe ways to care for the skeletal system</li> </ul>
Describe ways that the muscular system supports and protects the body and provides shape	<ul style="list-style-type: none"> <li>• Name and locate the major muscle groups of the muscular system</li> <li>• Describe how the muscular system produces body movements</li> <li>• Describe the functions and importance of the muscular system</li> <li>• Describe common problem conditions and injuries of the muscular system</li> <li>• Describe ways to prevent muscle injury</li> </ul>
Describe ways that physical fitness is essential for optimal health	<ul style="list-style-type: none"> <li>• Identify the components of physical fitness</li> <li>• Describe ways in which each fitness component can be developed</li> <li>• Assess their personal physical fitness levels</li> <li>• Describe the structure of a well-planned physical fitness program</li> <li>• Participate in a well-planned fitness program</li> </ul>

### Family Life

**Big ideas:** families, human development and reproduction, teen decisions, sexually transmitted disease, abuse prevention

Describe ways that there are many different family patterns	<ul style="list-style-type: none"> <li>• Identify family patterns in the community</li> </ul>
Explain ways that interpersonal relationships vary from casual to intimate	<ul style="list-style-type: none"> <li>• Describe types of interpersonal relationships</li> <li>• Identify characteristics that promote the development of relationships</li> </ul>
Identify how reproduction ensures the continuation of new life	<ul style="list-style-type: none"> <li>• Identify the structure and function of the male and female reproductive systems</li> </ul>

## HEALTH GRADE 8

### Family Life

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Describe how the development and union of reproductive sex cells are significant to the development of new life	<ul style="list-style-type: none"> <li>• Explain the significance of ovulation and sperm development to reproduction</li> </ul>
Explore and explain how assertiveness and abstinence are responsible behaviours for young adolescents	<ul style="list-style-type: none"> <li>• Explain why abstinence is a responsible behaviour for young adolescents</li> <li>• Practise assertive responses to sexual pressure</li> </ul>
Explain ways that individuals can plan the reproduction of new life	<ul style="list-style-type: none"> <li>• Describe some methods of birth control</li> </ul>
Describe ways that sexually transmitted diseases are serious communicable diseases that can be prevented	<ul style="list-style-type: none"> <li>• Identify the causes, characteristics, consequences, treatment and prevention of common sexually transmitted diseases</li> </ul>
Identify many types of violence that may occur within the family	<ul style="list-style-type: none"> <li>• Describe family violence</li> <li>• Identify factors that may lead to family violence</li> <li>• Describe methods of coping with family violence</li> </ul>
Describe how positive lifestyle practices promote health	<ul style="list-style-type: none"> <li>• Identify positive lifestyle practices that promote a young person's healthy sexuality and family relationships</li> <li>• Design a personal program to promote a healthy sexuality and/or family relationships</li> <li>• Evaluate the effectiveness of the program</li> </ul>

### Nutrition

Big Ideas: energy balance, food consumerism, lifestyle

Describe ways that each person has different energy needs	<ul style="list-style-type: none"> <li>• Define energy, metabolism and kilocalorie</li> <li>• Identify factors that determine our energy needs</li> <li>• Identify the energy used for different activities</li> <li>• Classify foods based on stored energy</li> </ul>
Describe how energy balance is when energy intake equals energy output	<ul style="list-style-type: none"> <li>• Explain how energy balance occurs</li> <li>• Estimate their energy intake and energy output for one day to determine energy balance</li> </ul>
Explain ways that diets can be analyzed to determine their nutritional adequacy and suitability	<ul style="list-style-type: none"> <li>• Evaluate the nutritional effectiveness and suitability of a variety of diets</li> </ul>
Explain how positive nutrition practices promote health and weight control	<ul style="list-style-type: none"> <li>• Identify the importance of weight control</li> <li>• Identify ways of promoting successful weight control</li> </ul>

### Dental Health

Big Ideas: factors affecting dental health, products and services, lifestyle

Explain how foods eaten affect a person's dental health	<ul style="list-style-type: none"> <li>• Identify go, caution and stop foods related to dental health</li> </ul>
Describe preventive dental procedures by professionals promote dental health	<ul style="list-style-type: none"> <li>• Identify professional preventive procedures that promote dental health</li> </ul>
Explain ways in which dental health products promote dental health	<ul style="list-style-type: none"> <li>• Identify the importance of fluoride in promoting healthy teeth</li> <li>• Identify some common dental health products</li> </ul>
Describe ways that prevention of dental health problems is a personal responsibility	<ul style="list-style-type: none"> <li>• Assess dental and nutritional adequacy of foods consumed in a given time period</li> <li>• Design a personal action plan to promote dental health</li> <li>• Evaluate the effectiveness of the action plan</li> </ul>

## HEALTH GRADE 8

### Safety and First Aid

Big Ideas: outdoor safety, first aid

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Describe how outdoor survival requires meeting an individual's basic needs	<ul style="list-style-type: none"> <li>• Explain an individual's basic needs in order to survive</li> <li>• Outline basic survival skills</li> <li>• Design a survival kit</li> </ul>
Identify ways that safe boating practices prevent injuries and death	<ul style="list-style-type: none"> <li>• Identify the safety equipment needed for boating</li> <li>• Identify potential hazards and risky behaviours while boating that may result in injury and death</li> <li>• Explain safety practices and boating laws that prevent injuries and death</li> </ul>
Explain how sports safety involves wearing proper equipment and following safety practices	<ul style="list-style-type: none"> <li>• Describe proper equipment to wear for various sports activities</li> <li>• Identify safety rules to follow for various sports activities</li> </ul>
Explain ways that frostbite and hypothermia can be minimized and prevented by applying safety rules and first aid	<ul style="list-style-type: none"> <li>• Explain the causes of frostbite</li> <li>• Explain the safety rules to follow that prevent frostbite</li> <li>• Demonstrate first aid for each type of frostbite</li> <li>• Explain what hypothermia is and its causes</li> </ul>
Identify how safety can be enhanced by group co-operation	<ul style="list-style-type: none"> <li>• Explain ways in which their group role members can contribute to a successful co-operative Learning Group</li> <li>• Work with members of their group to plan an outdoor trip</li> </ul>
Describe ways that eye injuries can be prevented and minimized by applying safety rules and first aid	<ul style="list-style-type: none"> <li>• State common causes of eye injuries in the NWT</li> <li>• Identify potential hazards and related risky behaviours that may result in eye injuries</li> <li>• Explain safety rules to follow that prevent eye injuries</li> <li>• Demonstrate first aid for eye injuries</li> </ul>
Explain how head injuries can be prevented and minimized by applying safety rules and first aid	<ul style="list-style-type: none"> <li>• State common causes of head injuries</li> <li>• Identify potential hazards and related risky, behaviours that may result in head injuries</li> <li>• Explain safety rules to follow that prevent head injuries</li> <li>• Demonstrate first aid for head injuries</li> </ul>
Explain why it is important to recognize convulsions in children and to apply first aid	<ul style="list-style-type: none"> <li>• Explain what convulsions are</li> <li>• Describe the signs of convulsions</li> <li>• Demonstrate first aid for convulsions</li> </ul>
Describe why fainting requires first aid to restore the blood supply to the brain	<ul style="list-style-type: none"> <li>• Give examples of causes of fainting</li> <li>• Identify the signs that may result in fainting</li> <li>• Demonstrate first aid for fainting</li> </ul>
Describe how to recognize allergic reactions can may be life threatening and how to apply first aid	<ul style="list-style-type: none"> <li>• Explain what an allergic reaction is</li> <li>• Describe how food and drug allergies can affect people differently from mild to life threatening</li> <li>• Describe the signs and symptoms of allergic reactions to food, drugs</li> <li>• Explain first aid for these reactions</li> </ul>
Identify ways that positive safety and first aid lifestyle practices may save lives and minimize the effects of injuries	<ul style="list-style-type: none"> <li>• Identify the importance of first aid</li> <li>• Design a personal safety and first aid program</li> <li>• Evaluate the effectiveness of the program</li> </ul>
Explore and describe why it is important to recognize epileptic seizures and to apply first aid	<ul style="list-style-type: none"> <li>• Explain what epilepsy is</li> <li>• Describe the signs and symptoms of epileptic seizures</li> <li>• Explain first aid for an epileptic seizure</li> </ul>

## HEALTH GRADE 8

### Safety and First Aid

Big Ideas: outdoor safety, first aid

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Describe why it is important to recognize diabetic emergencies and to apply first aid	<ul style="list-style-type: none"> <li>• Explain what diabetes is and its treatment</li> <li>• Differentiate between insulin shock and diabetic coma</li> <li>• Explain first aid for a diabetic emergency</li> </ul>

### ALCOHOL and Other Drugs

Big Ideas: Alcohol historical perspective and NWT, cannabis, solvents

Explore and explain ways that the drinking of alcohol in the N.W.T. Has a distinct historical presence	<ul style="list-style-type: none"> <li>• Recognize the presence and drinking of alcohol throughout time</li> <li>• Explain the distinct history of alcohol in the N.W.T.</li> <li>• Recognize the relationship between the drinking pattern in the N.W.T. and the northern lifestyle</li> </ul>
Describe ways in which most people who choose to drink alcohol use it responsibly	<ul style="list-style-type: none"> <li>• Identify the choices which people have with regard to the use of alcohol</li> <li>• Explain the responsible use of alcohol</li> <li>• Identify ways in which people demonstrate responsible use of alcohol</li> </ul>
Explore and describe ways that alcohol may be misused and abused	<ul style="list-style-type: none"> <li>• Explain misuse and abuse of alcohol</li> <li>• Identify alcoholism as a treatable disease</li> <li>• Identify the progressive stages of alcoholism</li> <li>• Identify the resources available in the community to help someone with an alcohol problem</li> </ul>
Explain ways that teenagers may have drinking problems	<ul style="list-style-type: none"> <li>• Identify how a person's life may be affected by alcohol</li> <li>• Identify the particular problems which alcohol may cause for teenagers</li> <li>• Assess their personal alcohol use</li> <li>• Review the resources available in a community for youth</li> </ul>
Explore why it is dangerous to combine drugs	<ul style="list-style-type: none"> <li>• Explain why drugs should never be combined</li> </ul>
Explain how it is that everything a pregnant woman puts into her body affects not only her, but also the unborn child	<ul style="list-style-type: none"> <li>• Identify food and drink which are healthy for the unborn baby</li> <li>• Explain that everything a pregnant woman eats or drinks affects the unborn baby</li> </ul>
Describe how fetal alcohol syndrome is totally preventable	<ul style="list-style-type: none"> <li>• Describe fetal alcohol syndrome</li> <li>• Identify behaviours which will prevent fetal alcohol syndrome</li> </ul>
Explain how advertising can influence people's decisions about the use of drugs	<ul style="list-style-type: none"> <li>• Identify techniques used in advertising to influence people's decisions</li> <li>• Interpret information from the advertisements</li> <li>• Design an advertisement</li> <li>• Identify the images of alcohol as portrayed by advertisers</li> <li>• Identify the negative effects of alcohol use</li> </ul>
Describe how cannabis use can affect both physical and psychological development	<ul style="list-style-type: none"> <li>• Identify some short-term physical effects of cannabis use</li> <li>• Identify some long-term physical effects of cannabis use</li> <li>• Identify some short-term psychological effects of cannabis use</li> <li>• Identify some long-term psychological effects of cannabis</li> </ul>
Explain ways that cannabis use may affect the reproductive system	<ul style="list-style-type: none"> <li>• Identify the possible effects of cannabis on the reproductive system and on the unborn fetus</li> </ul>
Explore and describe how solvent abuse has short and long term effects on the body	<ul style="list-style-type: none"> <li>• Identify some short-term effects of solvent abuse</li> <li>• Identify some long-term effects of solvent abuse</li> </ul>

## CAREER DEVELOPMENT GRADE 8

### Competencies

NWT Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Build and maintain a positive self-image</b>	<ul style="list-style-type: none"> <li>• Discover how behaviours and attitudes influence the feelings and behaviours of others 1.2.1</li> <li>• Understand how the environment influences attitudes and behaviours 1.2.3</li> <li>• Understand the concepts of values and beliefs, and explore their influence on self-image 1.2.4</li> <li>• Discover the importance of developing a realistic and positive self-image, and the consequences of developing an erroneous one 1.2.5</li> <li>• Discover how a realistic and positive self-image contributes to self-fulfilment, both personally and professionally 1.2.6</li> <li>• Describe one’s self-image 1.2.7</li> <li>• Adopt behaviours that reflect a positive attitude about self 1.2.8</li> <li>• Evaluate the impact of one’s self-image on self and others 1.2.9</li> <li>• Transform behaviours and attitudes in order to improve one’s self-image and in turn contribute positively to one’s life and work. 1.2.10</li> </ul>
<b>Interact positively and effectively with others</b>	<ul style="list-style-type: none"> <li>• Explore interpersonal and group communication skills 2.2.3</li> <li>• Explore personal management skills such as time management, problem solving, stress management, life-work balance, etc 2.2.4</li> <li>• Explore helping skills such as facilitating, problem solving, tutoring and guiding 2.2.5</li> <li>• Demonstrate respect for the feelings and beliefs of others 2.2.6</li> <li>• Demonstrate tolerance and flexibility in interpersonal and group situations 2.2.7</li> <li>• Demonstrate effective social and group membership skills, knowledge and attitudes 2.2.9</li> <li>• Demonstrate openness to the diversity of cultures, lifestyles, as well as mental and physical abilities 2.2.10</li> <li>• Demonstrate helping skills such as problem solving, tutoring and guiding 2.2.11</li> <li>• Demonstrate dependability and honesty towards others 2.2.12</li> <li>• Acknowledge and appreciate the similarities and differences among people 2.2.14</li> <li>• Re-examine one’s respect, tolerance, flexibility, openness, dependability and honesty towards others and determine at what degree they are influencing the development of positive relationships in one’s life 2.2.15</li> <li>• Integrate personal management skills such as time management, problem solving, stress management and life/work balance to one’s daily life 2.2.16</li> <li>• Engage in further learning experiences that help build positive relationships in one’s life 2.2.17</li> </ul>

## CAREER DEVELOPMENT GRADE 8

### Competencies

NWT Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Change and grow throughout one’s life</b>	<ul style="list-style-type: none"> <li>• Explore how feelings are influenced by significant experiences 3.2.1</li> <li>• Understand the concept of stress and its impact on mental and physical well-being 3.2.2</li> <li>• Discover changes that occur in the physical, psychological, social and emotional development of an individual 3.2.4</li> <li>• Understand how physiological and psychological changes impact on life and work 3.2.5</li> <li>• Explore the importance of work, family and leisure activities to mental, emotional, physical and economic well-being 3.2.6</li> <li>• Identify what cause stress on one’s own mental and physical well-being 3.2.7</li> <li>• Demonstrate effective communication skills in stressful situations (assertiveness, conflict resolution, problem solving, etc.) 3.2.8</li> <li>• Identify one’s own physical, psychological, social and emotional changes 3.2.9</li> <li>• Re-examine one’s communication skills and adopt those that are truly effective in stressful situations 3.2.10</li> <li>• Examine one’s work, family and leisure activities and acknowledge their impact on one’s mental, emotional, physical and economic well-being 3.2.11</li> <li>• Improve on communication skills used in stressful situations 3.2.12</li> <li>• Engage in further work, family and leisure activities that contribute to one’s mental, emotional, physical and economic well-being 3.2.13</li> </ul>
<b>Participate in life-long learning supportive of life/work goals</b>	<ul style="list-style-type: none"> <li>• Explore life-long learning strategies 4.2.1</li> <li>• Demonstrate life-long learning strategies 4.2.11</li> <li>• Improve and engage in life-long learning strategies supportive of one’s life/work scenarios 4.2.17</li> </ul>
<b>Locate and understand life/work information</b>	<ul style="list-style-type: none"> <li>• Discover differences between work, jobs, occupations and careers 5.2.1</li> <li>• Discover how occupations, work roles and work alternatives (e.g. self-employment, contracting, multitasking) can be classified 5.2.2</li> <li>• Explore economic /work sectors 5.2.3</li> <li>• Explore school and community information resources on work roles and work alternatives 5.2.4</li> <li>• Explore various work settings and roles in the community 5.2.6</li> <li>• Explore various work settings 5.2.7</li> <li>• Use school and community settings and resources to learn about work roles and work alternatives 5.2.8</li> <li>• Demonstrate how one’s interests, knowledge, skills, beliefs and attitudes are transferable to various work roles 5.2.9</li> <li>• Identify working conditions for oneself 5.2.10</li> <li>• Assess life/work information and determine its pertinence for oneself 5.2.11</li> <li>• Improve one’s strategies for locating, understanding and using life/work information 5.2.12</li> </ul>



## CAREER DEVELOPMENT GRADE 8

### Competencies

NWT Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Understand the relationship between Work and society/economy</b>	<ul style="list-style-type: none"> <li>• Explore the importance of work to a community 6.2.2</li> <li>• Understand the relationships between work, community and the economy 6.2.3</li> <li>• Explore the economic contributions workers make to a community 6.2.4</li> <li>• Understand how the community, the economy and technological advances impact work and work roles 6.2.5</li> <li>• demonstrate how work actually impacts one’s community 6.2.6</li> <li>• Evaluate how one can contribute to the community through work 6.2.7</li> </ul>
<b>Secure/create and maintain work</b>	<ul style="list-style-type: none"> <li>• Explore personal qualities (e.g. dependability, punctuality, getting along with others) that are needed to get and keep work 7.2.1</li> <li>• Understand the language describing employment and other work opportunities 7.2.3</li> <li>• Explore work search tools and skills required to find/create and maintain work (application forms, resumes, cover letters, portfolios, job interviewing, proposals, etc.) 7.2.4</li> <li>• Demonstrate personal qualities that are needed to get and keep work 7.2.5</li> <li>• Demonstrate the ability to complete application forms 7.2.6</li> <li>• Demonstrate work search tools required to find and maintain work (e.g. resume, portfolio, proposals, cover letters) 7.2.7</li> </ul>
<b>Make life/work enhancing decisions</b>	<ul style="list-style-type: none"> <li>• Understand how personal beliefs and attitudes affect decision-making 8.2.1</li> <li>• Explore possible outcomes of decisions 8.2.3</li> <li>• Explore the requirements for secondary and post secondary programs 8.2.8</li> <li>• Understand how uncertainties about the future may lead to creative or alternative choices 8.2.9</li> <li>• Demonstrate how one’s beliefs and attitudes influence one’s decision-making process 8.2.10</li> <li>• Compare advantages and disadvantages of various secondary and post secondary programs for the attainment of career goals 8.2.12</li> <li>• Evaluate how one’s decisions (about school, family, leisure, work, etc.) impact one’s life, and affect other decisions 8.2.15</li> <li>• 8.2.17 Evaluate the impact of personal decisions on self and others</li> <li>• 8.2.18 Engage in decision-making respectful of oneself and supportive of one’s goals</li> </ul>

## CAREER DEVELOPMENT GRADE 8

### Competencies

NWT Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Maintain balanced life and work roles</b>	<ul style="list-style-type: none"> <li>• Understand how different work and family roles require varying kinds of energy, participation, motivation and abilities 9.2.1</li> <li>• Examine how personal goals can be satisfied through a combination of work, community, social and family roles 9.2.3</li> <li>• Understand how personal leisure choices relate to lifestyle 9.2.4</li> <li>• Understand how various life and work roles impact the attainment of future goals 9.2.5</li> <li>• Explore the advantages and disadvantages of various life role scenarios 9.2.6</li> <li>• Explore the interrelationships among family, work and leisure decisions 9.2.7</li> <li>• Plan and experience leisure activities that relate to one’s considered or preferred lifestyle 9.2.8</li> <li>• Examine the type of lifestyle one wants 9.2.10</li> <li>• Determine the type of life and work roles that best impact one’s life 9.2.11</li> </ul>
<b>Understand the changing nature of life/work roles</b>	<ul style="list-style-type: none"> <li>• Identify non-traditional life/work scenarios 10.2.1</li> <li>• Explore the advantages of experiencing personal interests, even if they are most often considered non-traditional (<i>to one’s gender</i>) 10.2.3</li> <li>• Understand the concepts of stereotypes, biases and discriminatory behaviours 10.2.4</li> <li>• Experience personal interests, even if they are most often considered non-traditional to one’s gender 10.2.5</li> <li>• Identify stereotypes, biases and discriminatory behaviours that may limit opportunities for women and men in certain work roles 10.2.6</li> <li>• Acknowledge one’s own stereotypes, biases and discriminatory behaviours that may limit opportunities for oneself or others in certain work roles 10.2.7</li> <li>• Develop attitudes and engage in behaviours that are non-discriminatory 10.2.8</li> </ul>
<b>Understand, engage in and manage one’s own life/work building process</b>	<ul style="list-style-type: none"> <li>• Explore the concept every decision is a life/work decision 11.2.1</li> <li>• Understand the importance of developing flexible and adaptable short-term action plans within the life/work building process 11.2.4</li> <li>• Understand the concept of a preferred future as part of the life/work building process 11.2.5</li> <li>• Understand the concept and importance of a life/work portfolio 11.2.6</li> <li>• Define one’s preferred future 11.2.7</li> <li>• Develop short-term action plans in step with one’s preferred future 11.2.8</li> <li>• Create and maintain one’s life/work portfolio 11.2.9</li> <li>• Re-examine and assess one’s preferred future using as criteria newly acquired information about self and the world of work 11.2.10</li> <li>• Take steps to move towards one’s preferred future 11.2.11</li> <li>• Adjust one’s preferred future as experience changes one’s knowledge of oneself 11.2.12</li> </ul>

## ART GRADE 8

### Dance

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Creative/Productive (CP) K-12 Goal: Students will inquire, create, and communicate through dance, drama, music, and visual art.</b>	
Create dance compositions that express ideas and student perspectives on social issues (e.g., poverty, racism, homophobia, sustainability, gangs). CP8.1	<ul style="list-style-type: none"> <li>• Use inquiry in dance to express student perspectives on social issues (e.g., poverty, racism, homophobia, sustainability):               <ul style="list-style-type: none"> <li>○ Generate key questions to guide inquiry in dance (e.g., How could we represent through dance the devastating effects of poverty or racism?).</li> <li>○ Summarize and focus knowledge of topic to determine information needs.</li> <li>○ Generate additional relevant questions for deeper exploration.</li> <li>○ Use the Internet and other relevant sources (e.g., print, digital, community) to research and gather ideas for dance-making.</li> <li>○ Adjust inquiry and research strategies to accommodate changing perspectives.</li> <li>○ Use the dance-making process to explore the central questions and ideas (e.g., How could we show through movement the effects of a hurtful comment?).</li> <li>○ Expand on dance and movement ideas in reflective records such as journals, blogs, and video or audio recordings.</li> <li>○ Keep a record of dance phrases using invented and/or traditional notation symbols, and video where possible, to explore, record, and reconstruct movements.</li> <li>○ Reflect, analyze, and make connections between the original topic or inquiry question and subsequent dance explorations.</li> </ul> </li> <li>• Investigate how a single idea can be developed in many ways and directions (e.g., How many different ways can we represent through movement a feeling of hopelessness or anger about this injustice?).</li> <li>• Reflect on how movement, dance elements, and principles of composition can be organized to convey meaning in dance (e.g., What message or ideas does our dance communicate about current attitudes towards poverty or racism?).</li> <li>• Contribute to the creation of a plan to document the inquiry and creative process (e.g., video, photography, blog, or digital diary).</li> </ul>
Investigate and use choreographic forms (e.g., theme and variations, canon). CP8.2	<ul style="list-style-type: none"> <li>• Collaborate on the creation of a concept web of dance elements and possible movements related to an inquiry question.</li> <li>• Use the concept web as a guide for movement exploration and improvisation.</li> <li>• Order the movements (sequence) into various forms (e.g., ABA, ABBA, canon).</li> <li>• Use body and actions in innovative ways to develop sequences and ideas.</li> <li>• Investigate expressive ways of using dynamics, rhythm, spatial design, focus, relationships, transitions, and contrast.</li> <li>• Sequence and develop movements to express and communicate ideas.</li> <li>• Perform self-created and collaboratively-created sequences of movements with smooth transitions (see grade 8 physical education curriculum outcome 8.9) during warm-ups and dance compositions.</li> </ul>
Choreograph one section of group choreography. CP8.3	<ul style="list-style-type: none"> <li>• Demonstrate leadership and collaborative skills in the creation of one section of a group choreography.</li> <li>• Encourage peers to explore and contribute movement phrases to group choreography.</li> <li>• Draw on own imagination and ideas, and strengths of other dancers, when choreographing dance section.</li> <li>• Contribute to group discussions regarding possible structures or form for the dance (e.g., ABA, ABACA, narrative).</li> <li>• Improvise and collaborate to refine movements and develop the choreography.</li> </ul>

## ART GRADE 8

### Dance

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
(Continued)	<ul style="list-style-type: none"> <li>• Record dance phrases (e.g., notation or video) to further explore and reconstruct movements.</li> <li>• Encourage peers to extend bodies' range of movement, strength, and balance with attention paid to correct alignment and clarity of action.</li> </ul>

### Drama

Demonstrate how dramatic characters interact in relationships within the drama and/or collective creation. CP8.4	<ul style="list-style-type: none"> <li>• Sustain belief in own roles and in the roles assumed by others for extended periods of time.</li> <li>• Demonstrate confidence and curiosity when assuming different kinds of roles in drama work.</li> <li>• Describe own roles and specific contributions to the collective drama work.</li> <li>• Describe how focus, tension, and contrast function within the drama.</li> <li>• Demonstrate awareness of how focus is maintained and shifts during pair, small, and whole group drama work.</li> <li>• Reflect on sources and functions of tension expressed in relationships among roles or characters portrayed.</li> <li>• Examine how contrasts among characters function within the drama.</li> </ul>
Investigate how theatrical elements (e.g., story, character, design, space) are combined to achieve dramatic purpose. CP8.5	<ul style="list-style-type: none"> <li>• Identify how theatrical elements (e.g., story, role or character, technical design) can be manipulated to achieve a creative purpose and consider how such elements relate to own drama work.</li> <li>• Analyze how each character's actions and the consequences of those actions affect the progression of the drama.</li> <li>• Consider and analyze how set, costumes, lighting, and sound/music design can be manipulated to achieve different effects in own work.</li> <li>• Demonstrate imagination when creating imaginary places and situations in own drama work.</li> <li>• Analyze the use of movement, and the use of space and time in own work.</li> </ul>
Express student perspectives on social issues (e.g., poverty, racism, homophobia, sustainability, gangs) in drama and/or collective creation. CP8.6	<ul style="list-style-type: none"> <li>• Analyze and discuss how drama may be used to explore perspectives on social issues and promote understanding of topics of personal significance.</li> <li>• Use inquiry in drama to investigate topics of importance to students (e.g., issues of concern to youth or recent news items):               <ul style="list-style-type: none"> <li>○ Collaborate with other students to explore compelling questions through drama (What if a new law was passed that ...?).</li> <li>○ Brainstorm and negotiate with other students to determine how fictional situations and dramatic episodes might be explored.</li> <li>○ Collaborate on the development and refinement of several drama episodes or collective creation to address the selected issue.</li> <li>○ Recognize how research contributes to the authenticity and significance of the drama work.</li> <li>○ Contribute to the creation of a plan to document the creative process (e.g., reflective journal entries, video, photography, blog, or web-based diary).</li> </ul> </li> <li>• Demonstrate awareness of how to use language and negotiate the use of drama strategies to achieve dramatic purpose.</li> <li>• Analyze and describe the effectiveness of own drama to convey perspectives.</li> </ul>

## ART GRADE 8

### Music

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Improvise, compose, and perform (e.g., with voice, instruments, and technologies) a selection of pieces in contrasting styles. CP8.7	<ul style="list-style-type: none"> <li>• Examine and apply the technique of vocal improvisation in song and speech.</li> <li>• Improvise simple pieces around a given structure.</li> <li>• Create and improvise with an instrument paying attention to sound quality and intonation.</li> <li>• Investigate ways that silence can be used in improvisation and music composition.</li> <li>• Investigate timbres, textures, and rhythmic and melodic possibilities in improvisation.</li> <li>• Create composed and improvised melodic and rhythmic ostinati to accompany singing and playing.</li> <li>• Use the Internet and other sources to research and discuss composers who work in contrasting styles.</li> <li>• Prepare, rehearse, present, and evaluate individual and group performances of contrasting styles of music.</li> </ul>
Investigate and make choices about musical structures in sound composition. CP8.8	<ul style="list-style-type: none"> <li>• Use inquiry in music to extend understanding of the elements of music and principles of composition:               <ul style="list-style-type: none"> <li>○ Pose questions to guide inquiry into how elements of music can be manipulated and structured to create balance and unity (e.g., What are the rhythmic and melodic possibilities/limitations with this instrument? What different timbres are possible with this instrument? What textures can be created by combining or layering a variety of vocal or instrumental sounds?).</li> <li>○ Conduct a collaborative inquiry and experiment with voice and instruments to explore inquiry questions about musical structure (e.g., In what ways could we rearrange these motifs or phrases in different sequences?).</li> <li>○ Collaborate with peers to document the inquiry process (e.g., traditional and/or invented notation, audio or video recording).</li> </ul> </li> <li>• Critically examine the connections between the elements of music and principles of composition in own compositions and other music.</li> <li>• Demonstrate knowledge of how the elements and principles are used to create form and structure in music.</li> </ul>
Compose sound compositions in response to social issues (e.g., poverty, racism, homophobia, sustainability, gangs). CP8.9	<ul style="list-style-type: none"> <li>• Examine the intentions, development, and interpretations of own and others' music expressions in relation to social issues (e.g., antiwar songs, music with environmental messages, hip hop songs that promote positive life choices).</li> <li>• Create and perform own music compositions, improvisations, or song lyrics in response to a social issue of importance to students.</li> <li>• Make interpretive decisions, demonstrating understanding of a variety of ways in which music concepts can be applied (e.g., tempo, dynamics, articulation, tone colour).</li> <li>• Determine appropriate sound sources, forms, and processes for creating music expression.</li> <li>• Explore and expand upon a musical idea to achieve more depth of meaning and expression.</li> <li>• Generate and develop music ideas from a variety of sources regarding social issues of interest to students.</li> <li>• Keep an ongoing record of ideas for own sound/music expressions (e.g., journals, audio tapes, video, blog, or web diary).</li> <li>• Describe how compositions are personal expressions of own sound/music ideas.</li> <li>• Extend understanding and use of traditional and non-traditional notational systems in representing sounds/music.</li> </ul>

## ART GRADE 8

### Visual Art

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Create visual art works that express student perspectives on social issues (e.g., poverty, racism, homophobia, sustainability). CP8.10	<ul style="list-style-type: none"> <li>• Use inquiry in visual art to express student perspectives on social issues (e.g., poverty, racism, homophobia, sustainability):               <ul style="list-style-type: none"> <li>○ Generate key questions to guide inquiry (e.g., How could we represent through visual art the devastating effects of poverty or racism?).</li> <li>○ Collaborate with other students to develop a plan to guide inquiry.</li> <li>○ Collaborate with other students to determine how to document the creative process.</li> </ul> </li> <li>• Demonstrate co-ordination and skills for using appropriate tools, materials, and techniques to express ideas visually.</li> </ul>
Select and use appropriate forms, technologies, images, and art-making processes to express student perspectives on social issues. CP8.11	<ul style="list-style-type: none"> <li>• Select visual art forms (e.g., print-making, installations, animation) to express ideas about social issues.</li> <li>• Create three-dimensional and two-dimensional art works, and use knowledge of art elements and design principles to enhance the work.</li> <li>• Investigate the effects of using more or less contrast.</li> <li>• Examine how visual weight is created through the use of size, colour, contour, contrast, texture, value, position, and so on.</li> <li>• Analyze and discuss how images and materials work together to express ideas in a work of art.</li> <li>• Describe how emphasis controls the sequence in which parts or images are noticed, and indicates their relative importance.</li> <li>• Use symbols and other images to develop and represent ideas.</li> <li>• Examine how artists use symbols and imagery to communicate meaning, and apply this understanding in own work.</li> </ul>
Solve visual art problems using a variety of processes and media. CP8.12	<ul style="list-style-type: none"> <li>• Explore and expand upon an idea to achieve more depth of meaning and expression.</li> <li>• Generate and develop ideas from a variety of sources that are of interest or personal significance.</li> <li>• Keep an ongoing record of ideas and works in progress for own visual art expressions (e.g., journals, blog, online diary, or portfolio).</li> <li>• Take risks by working with innovative ideas, unfamiliar styles, or media.</li> <li>• Explain original intent, why choices were made, how problems were solved, and how work might be refined or extended.</li> </ul>
<b>Dance, Drama, Music, Visual Art</b> <b>CRITICAL/RESPONSIVE (CR) K-12 Goal:</b> Students will respond to artistic expressions of Saskatchewan, Canadian, and International artists using critical thinking, creativity, research, and collaborative inquiry.	
Respond to professional dance, drama, music, and visual art works through the creation of own arts expressions. CR8.1	<ul style="list-style-type: none"> <li>• Describe, analyze, and interpret arts expressions of personal interest.</li> <li>• Analyze and discuss how dance, drama, music, visual and interdisciplinary arts are expressions of individual or collective perspectives.</li> <li>• Respond to arts expressions using one or more approaches such as those described in online curriculum support materials entitled “Responding to Arts Expressions”.</li> <li>• Create own work (e.g., visual or performing arts) in response to a professional arts expression, and describe how own work is inspired or influenced by the original work.</li> </ul>

## ART GRADE 8

### Dance, Drama, Music, Visual Art

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Investigate and identify ways that today's arts expressions often reflect concern for social issues. CR8.2	<ul style="list-style-type: none"> <li>• Reflect on and analyze the intentions, development, and interpretations of own and peers' arts expressions in relation to social contexts (e.g., Is the work influenced by pop culture or local community issues?).</li> <li>• Conduct inquiry into social justice and diversity issues in the arts including stereotyping and bias (e.g., stereotyping of male dancers, or the lack of women or First Nations artists represented in history of the arts books).</li> <li>• Describe, analyze, and interpret the work (dance, drama, music, visual, film) of a variety of artists whose work incorporates social commentary.</li> </ul>
Investigate and identify how arts expressions can reflect diverse worldviews. CR8.3	<ul style="list-style-type: none"> <li>• Discuss and describe the meaning of worldview.</li> <li>• Describe how diverse worldviews may be represented in the arts.</li> <li>• Examine global change and its influence on today's arts expressions.</li> <li>• Examine, discuss, and participate in cultural/historical studies from diverse cultural perspectives (e.g., learn heritage social dances, play Latin music, or create Indonesian shadow puppets).</li> </ul>
<b>CULTURAL HISTORICAL (CH) K-12 Goal: Students will investigate the content and aesthetics of the arts within cultural, historical, and contemporary contexts and understand the connection between the arts and human experience.</b>	
Research and share insights about arts expressions that incorporate social commentary. CH8.1	<ul style="list-style-type: none"> <li>• Research independently, using the Internet and other sources, the work of visual and performing artists who address social issues.</li> <li>• Present research findings, using technology where appropriate, on Canadian visual and performing artists whose work includes social commentary.</li> <li>• Analyze and comment on the effectiveness of using the arts as a vehicle for social change.</li> </ul>
Analyze the influence of social issues on the work of contemporary First Nations, Métis, and Inuit artists, and share results. CH8.2	<ul style="list-style-type: none"> <li>• Research First Nations, Métis, and Inuit artists who use their art work to explore and comment on social issues (e.g., Susan Aglukark, Edward Poitras).</li> <li>• Identify social factors that influence First Nations, Métis, and Inuit artists, their work, and careers (e.g., typecasting of actors, limited access to venues and markets).</li> <li>• Investigate the work of artists that reflects a concern with historical events including Treaties and the impacts of colonization such as residential schools, racism, and marginalization.</li> <li>• Create a plan to share the research findings with younger and older students and community members where possible (e.g., create a dance, drama, music performance, or visual installation).</li> </ul>
Demonstrate understanding of how contemporary artists use and incorporate new technology into their work. CH8.3	<ul style="list-style-type: none"> <li>• Ask questions to initiate and develop inquiry into artists who use technology and incorporate technology into their work.</li> <li>• Describe the role of new technology in the creation and marketing of contemporary arts (e.g., innovative graphics programs, music editing software, social networking sites).</li> </ul>
Examine and respond to the work of artists who incorporate more than one art form in their work (e.g., combining poetry and music). CH8.4	<ul style="list-style-type: none"> <li>• Examine and discuss various interdisciplinary arts expressions (i.e., using two or more disciplines in the work).</li> <li>• Collaborate with others to create interdisciplinary work that addresses issues of social justice and/or other topics of interest to youth (e.g., relationships, body image, racism, sustainability).</li> </ul>

## PHYSICAL EDUCATION GRADE 8

### Activity

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Select, combine and perform specific locomotor skills in a variety of activities to improve personal performance A8–1	<ul style="list-style-type: none"> <li>• Perform dance steps; e.g., swing, skip, do-si-do and grapevine, with and without music, individually and with others. (Dance)</li> <li>•</li> </ul>
Select, combine and perform locomotor skills by using elements of body and space awareness, effort and relationships to improve personal performance A8–2	<ul style="list-style-type: none"> <li>• Plan and lead aerobic activities, combining locomotor and nonlocomotor skills, with or without music. (Individual Activities)</li> </ul>
Select, combine and perform specific nonlocomotor skills in a variety of activities to improve personal performance A8–3	<ul style="list-style-type: none"> <li>• Create a movement sequence with a partner, showing contrasting balances at different levels. Include two different rolls and two jumps in the sequence. (Types of Gymnastics)</li> </ul>
Select, combine and perform nonlocomotor skills by using elements of body and space awareness, effort and relationships, to improve personal performance A8–4	<ul style="list-style-type: none"> <li>• Move through an obstacle course outside or in the gymnasium, that includes skills like balancing, hanging and twisting. (Alternate Environments)</li> </ul>
Demonstrate ways to receive, retain and send an object with varying speeds, accuracy and distance in skills specific to an activity A8–5	<ul style="list-style-type: none"> <li>• Work individually against a wall, with partners and in small groups to practise activity-specific motor skills; e.g., kicking, forehand stroke. Discuss the body mechanics involved and how to assess progress. (Games)</li> </ul>
Select, combine and perform manipulative skills by using elements of space awareness, effort and relationships, with and without objects, to improve performance A8–6	<ul style="list-style-type: none"> <li>• Practise various throwing activities, using specific criteria and peer review skills. (Individual Activities)</li> </ul>
Apply activity-specific skills in a variety of environments and using various equipment; e.g., cross-country skiing, skating A8–7	<ul style="list-style-type: none"> <li>• Become cognizant of and able to apply similar concepts and skills in different environments; e.g., apply force production in a stroking action in skating and cross-country skiing. (Alternate Environments)</li> </ul>
Select, refine and present a variety of dance sequences; e.g., jazz, square, social and novelty, alone and with others A8–8	<ul style="list-style-type: none"> <li>• Perform a variety of dances from different cultures or historical time periods; e.g., troika, schottische, jive. Visit a local Métis association or First Nations Elder, and learn the basic steps of a traditional dance. (Dance)</li> </ul>
Choreograph and perform dance sequences, using the elements of movement and basic dance steps and patterns A8–9	<ul style="list-style-type: none"> <li>• Create a dance sequence based on a theme; e.g., anger, laughter, sports, water, flight, transportation. (Dance)</li> </ul>
Select, combine and perform activity-specific basic skills in a variety of games A8–10	<ul style="list-style-type: none"> <li>• Demonstrate aiming skills in a number of target activities; e.g., bocce, curling, bowling. (Games)</li> </ul>
Be able to identify and evaluate specific strategies and tactics that coordinate effort with others; e.g., team/fair play, in order to achieve a common activity goal A8–11	<ul style="list-style-type: none"> <li>• Practise specific offensive and defensive strategies, effective in the playing of territory games, in isolated game-like situations; e.g., two-on-two to practise pick-and-roll and give-and-go. (Games)</li> </ul>
Select and perform ways to improve the functional and expressive qualities of movements, that combine basic skills in a variety of gymnastic experiences individually, with a partner, or in a group; e.g., educational, rhythmic and artistic A8–12	<ul style="list-style-type: none"> <li>• Create sequences, with or without music, that use small objects, such as hoops, balls, clubs or ribbons, and that incorporate specific gymnastic skills. (Types of Gymnastics)</li> </ul>
Select, perform and refine activity specific skills in a variety of individual pursuits; e.g., wrestling A8–13	<ul style="list-style-type: none"> <li>• Use stations to practise track and field events. Move from station to station and record personal assessments and comments. (Individual Activities)</li> </ul>



## PHYSICAL EDUCATION GRADE 8

### Benefits Health

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Monitor and analyze a personal nutrition plan that affects physical performance B8–1	<ul style="list-style-type: none"> <li>List the effects of such things as carbohydrates, fats and proteins on the physical demands of various types of dance; e.g., aerobics, jive, ballet. (Dance)</li> </ul>
Demonstrate and monitor ways to achieve a personal functional level of physical fitness B8–2	<ul style="list-style-type: none"> <li>Participate in weight bearing activities; e.g., using soup cans or resistance tubing, as a way to increase flexibility and strength. Monitor and measure flexibility and strength progress over a period of time. (Individual Activities)</li> <li>Perform exercises to increase fitness levels for specific outdoor activities; e.g., flexibility and muscular endurance for cross-country skiing. (Alternate Environments)</li> </ul>
Explain fitness components and principles of training, and formulate individual plans for personal physical fitness B8–3	<ul style="list-style-type: none"> <li>Assess and record individual fitness levels in a portfolio. Plan a training program, set and modify goals, and reflect on results. (Individual Activities)</li> </ul>
Acknowledge the perceptions that occur as a result of media influence on body types in relation to physically active images B8–4	<ul style="list-style-type: none"> <li>Discuss the emotional and physical damage and risks associated with sport and fitness stereotypes, and role play examples of appropriate and inappropriate comments; e.g., “girls aren’t strong,” “jocks aren’t smart.” (Games)</li> <li>Listen to presentations by local program providers, such as a community recreation centre, outdoors club or club for skiers who are disabled. Try some activities like wheel chair basketball. (Alternate Environments)</li> <li>Discuss misconceptions, related to the participation of disabled athletes in physical activity, that may have been dispelled as a result of the presentations. (Alternate Environments)</li> </ul>
Discuss performance-enhancing substances and how they can affect body type in relation to physical activity B8–5	<ul style="list-style-type: none"> <li>Discuss the types of performance-enhancing substances that are common in gymnastics; e.g., steroids to increase strength and birth control pills to delay menarche, and discuss the negative side effects. Role play scenarios to convince users of dangers. (Types of Gymnastics)</li> <li></li> </ul>
Analyze the personal effects of exercise on the body systems before, during and after exercise B8–6	<ul style="list-style-type: none"> <li>Monitor and chart heart rate before, during and after various types of games; e.g., target, court, field and territorial. Discuss the similarities and differences in heart rate. (Games)</li> <li>Measure hamstring/low back flexibility before a class of jiggling, and then repeat measurements again after the class. Discuss how the circulatory system and the musculoskeletal system work together to increase flexibility through increased body temperature, lubrication of joints and stretching of soft tissues. (Dance)</li> </ul>
Monitor, analyze and assess fitness changes as a result of physical activity B8–7	<ul style="list-style-type: none"> <li>Discuss how gymnastic skills can enhance many fitness components, such as strength and flexibility, and select and engage in exercises for each component. (Types of Gymnastics)</li> </ul>
Describe and perform appropriate physical activities for personal stress management and relaxation B8–8	<ul style="list-style-type: none"> <li>Perform various stress management and relaxation exercises after receiving instruction from qualified instructors in the community; e.g., yoga. (Individual Activities)</li> <li>Participate in one-day field trips in a naturalist environment; e.g., cross-country skiing, mountain biking or hiking, and discuss the “whole body” benefits of such activities. (Alternate Environments)</li> </ul>
<b>Cooperation</b>	
Communicate thoughts and feelings in an appropriate respectful manner as they relate to participation in physical activity C8–1	<ul style="list-style-type: none"> <li>Perform dances for the class, videotaping the presentations. Watch the videocassette and highlight the positive aspects of the dances and those aspects that need improvement. (Dance)</li> </ul>

## PHYSICAL EDUCATION GRADE 8

### Cooperation

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Discuss positive active living role models C8–2	<ul style="list-style-type: none"> <li>Identify and discuss the positive attributes of local citizens, of varying ages, who are still active; e.g., doctor who jogs, school secretary who cycles. (Individual Activities)</li> </ul>
Demonstrate etiquette and fair play C8–3	<ul style="list-style-type: none"> <li>As a culminating activity, perform dances from previous generations to show appreciation for the old and new styles of dancing and to practise related social etiquette. (Dance)</li> <li>Participate in an educational gymnastics routine with a partner. Perform the routine, using balls, ribbons, hoops or ropes to demonstrate an exchange and interplay with the partner and equipment; e.g., perform a forward roll through a hoop, perform a forward roll with a ball. (Types of Gymnastics)</li> <li>Discuss rules, safety considerations and etiquette appropriate for specific activities, such as velodrome cycling or returning a shot after putting (shot-put). (Individual Activities)</li> </ul>
Describe, apply and practise leadership and followership skills related to physical activity C8–4	<ul style="list-style-type: none"> <li>Participate in a wall-climbing experience, and change leaders throughout the experience; e.g., one student determines the path for others to follow. (Alternate Environments)</li> </ul>
Recommend practices that contribute to teamwork C8–5	<ul style="list-style-type: none"> <li>Incorporate temporary rules to encourage teamwork; e.g., a different player each time to attempt to score. (Games)</li> </ul>
Identify and demonstrate positive behaviours that show respect for self and others C8–6	<ul style="list-style-type: none"> <li>Make one positive comment to a teammate and to an opponent during the playing of a game. (Games)</li> <li>Develop gymnastics sequences collaboratively with a partner to create various balance patterns. (Types of Gymnastics)</li> </ul>
<b>Do It Daily...For Life</b>	
Participate regularly in, and identify and describe the benefits of, an active lifestyle D8–1	<ul style="list-style-type: none"> <li>Participate in a variety of outdoor pursuits, keeping a log of experiences. Write a paper based on the log and the benefits of being active in the outdoors. (Alternate Environments)</li> </ul>
Develop a personal plan that encourages participation and continued motivation D8–2	<ul style="list-style-type: none"> <li>Modify existing games for alternative environments; e.g., hockey in the pool. (Alternate Environments)</li> </ul>
Select and apply rules, routines and procedures for safety in a variety of activities D8–3	<ul style="list-style-type: none"> <li>Discuss proper etiquette in dance routines and receive feedback when dances are demonstrated; e.g., bowing to partner and not swinging partner too hard when performing a square dance. (Dance)</li> </ul>
Design and perform warm-up and cool-down activities D8–4	<ul style="list-style-type: none"> <li>As a class, decide on warm-up and cool-down activities that establish safety procedures related to equipment use, set-up, take-down and emergency situations. (Types of Gymnastics)</li> </ul>
Appraise or judge movement experiences for safety that promote an active, healthy lifestyle; e.g., safe use of equipment D8–5	<ul style="list-style-type: none"> <li>Create a new game that demonstrates the use of safety skills that have been learned. Then demonstrate the new game to the class. (Games)</li> </ul>
Monitor, revise and refine personal goals based on interests and abilities D8–6	<ul style="list-style-type: none"> <li>Invite local athletes or active living role models to discuss how they use goals to increase their personal performance. Set individual goals and think of ways to reach them. (Individual Activities)</li> <li>Continually set personal challenges based on participation in a community sport; e.g., move higher on a tennis ladder at a drop-in centre/club, play for the local lacrosse team. (Games)</li> </ul>

## PHYSICAL EDUCATION GRADE 8

### Do It Daily...For Life

Outcomes	Achievement Indicators – Measurable outcomes
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
Evaluate different ways to achieve an activity goal, and determine personal and team approaches that are challenging for both the individual and the group D8-7	<ul style="list-style-type: none"> <li>• Choose a track and field event. Then develop a training program to increase performance and reach personal goals in this event. (Individual Activities)</li> <li>• Listen to guest instructors or watch a videocassette about different dance styles; e.g., ballroom, country, hip-hop, round (Aboriginal). Discuss how to incorporate such dances into leisure time; e.g., wedding dance, cultural ceremonies, school graduation. (Dance)</li> </ul>
Analyze community programs that promote a physically active lifestyle D8-8	<ul style="list-style-type: none"> <li>• Discover and use community resources to be active; e.g., canoeing, inline skating, swimming, cross-country skiing. (Alternate Environments)</li> </ul>
Analyze factors that affect choices of physical activity for life, and create personal strategies to overcome barriers D8-9	<ul style="list-style-type: none"> <li>• Discuss how developing total body strength and body control through gymnastics activity helps in everyday life; e.g., knowing how to land and roll out of a fall safely, being strong enough to climb out of a window in case of a fire. (Types of Gymnastics)</li> </ul>

## ICT - GRADE 8 - EXPANDING (GRADE 6 to ADULT)

### Cognitive Domain

Outcomes	Achievement Indicators	
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>	
	Plan and Question	Supporting Skills
<b>Knows – Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>• Recalls and or records prior knowledge and asks topic-related questions</li> <li>• Follows given plans</li> </ul>	
<b>Analyze – Apply</b> (Believe)	<ul style="list-style-type: none"> <li>• Constructs how and why questions, predictions, hunches, educated guesses and hypotheses and identifies information needs</li> <li>• Adapts given electronic plans</li> </ul>	<ul style="list-style-type: none"> <li>• Moves text and images</li> <li>• Inserts and edits text, data, images, sound, video and or formulas</li> <li>• Formats text, images, graphs, and tables using toolbar icons, menu options, and or keyboard shortcuts</li> <li>• Edits text using spell check, dictionary, thesaurus, grammar check, and or track changes</li> <li>• Formats page layout</li> <li>• Customizes the template of a graphic organizer, table, multimedia presentation, spreadsheet, and/or database</li> </ul>
<b>Synthesize – Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>• Evaluates original inquiry questions and creates new questions for future inquiry</li> <li>• Designs own electronic plans</li> </ul>	<ul style="list-style-type: none"> <li>• Manages electronic files and folders</li> <li>• Moves data between applications</li> <li>• Constructs graphic organizers, tables, spreadsheets, databases, multimedia presentations, and/or web pages</li> </ul>

## ICT - GRADE 8 - EXPANDING (GRADE 6 to ADULT)

### Cognitive Domain

Outcomes	Achievement Indicators	
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>	
	Gather and Make Sense	Supporting Skills
<b>Knows – Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>Finds and collects information from given media sources</li> </ul>	<ul style="list-style-type: none"> <li>Logs on and off ICT devices</li> <li>Opens applications and files</li> <li>Saves files Prints files</li> <li>Navigates within an application</li> <li>Browses multimedia</li> <li>Navigates within a website</li> <li>Searches the Internet using teacher-selected search engines and keywords</li> <li>Sends and receives text messages and electronic files using rules of etiquette</li> <li>Manipulates input devices</li> <li>Selects and uses peripherals to find, record, manipulate, save, print and/or display information</li> </ul>
	<ul style="list-style-type: none"> <li>Identifies sources of information and provides bibliographic/reference data</li> </ul>	<ul style="list-style-type: none"> <li>Recognizes and presses keys on the keyboard</li> <li>Inserts hyperlinks to electronic sources</li> </ul>
	<ul style="list-style-type: none"> <li>Records data or makes notes on gathered information and ideas using given categories and given ICT</li> </ul>	<ul style="list-style-type: none"> <li>Logs on and off ICT devices</li> <li>Opens applications and files</li> <li>Saves files</li> <li>Navigates within an application</li> <li>Moves data between applications</li> <li>Recognizes and presses keys on the keyboard</li> <li>Inserts and edits text, data, images, sound video and/or formulas</li> </ul>
	<ul style="list-style-type: none"> <li>Collects primary data using electronic devices</li> </ul>	<ul style="list-style-type: none"> <li>Captures digital data</li> </ul>
	<ul style="list-style-type: none"> <li>Questions whether information from media sources is real, useful, and/or distracting</li> </ul>	
<b>Analyze – Apply</b> (Believe)	<ul style="list-style-type: none"> <li>Refines information searches using a variety of media sources</li> </ul>	<ul style="list-style-type: none"> <li>Navigates within an application</li> <li>Browses the Internet</li> <li>Chooses /uses search engines &amp; own keywords</li> <li>Refines searches using Boolean logic</li> </ul>
	<ul style="list-style-type: none"> <li>Analyzes textual, numerical, aural, and visual information gathered from media sources, applying established criteria</li> </ul>	<ul style="list-style-type: none"> <li>Investigates currency, authorship of electronic sources such as websites, email, CD-ROMs, syndications, blogs, wikis, podcasts, and broadcast media</li> </ul>
	<ul style="list-style-type: none"> <li>Categorizes information using the ICT suitable for the purpose</li> </ul>	<ul style="list-style-type: none"> <li>Navigates within an application</li> <li>Moves data between applications</li> <li>Transfers ICT knowledge to new applications</li> </ul>
	<ul style="list-style-type: none"> <li>Analyzes if info from media sources is sufficient, suitable for purpose/audience</li> </ul>	
	<ul style="list-style-type: none"> <li>Analyzes whether information from media sources has been manipulated</li> </ul>	
<b>Synthesize Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>Incorporates new information with prior knowledge and adjusts inquiry strategies</li> </ul>	
	<ul style="list-style-type: none"> <li>Assesses textual, numerical, aural, and visual info, and sources of the media, to verify context, perspective, bias, motive</li> </ul>	

## ICT - GRADE 8 - EXPANDING LEARNER (Grade 6 to Adult)

### Cognitive Domain

Outcomes		Achievement Indicators	
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>		
Produce to Show Understanding		Supporting Skills	
<b>Knows – Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>• Participates in establishing criteria for student – created electronic work</li> </ul>		
	<ul style="list-style-type: none"> <li>• Composes text, records, sound, sketches images, graphs, data, and/or creates video</li> </ul>	<ul style="list-style-type: none"> <li>• Logs on and off ICT devices</li> <li>• Opens applications and files</li> <li>• Saves files</li> <li>• Navigates within an application</li> <li>• Manipulates input devices</li> <li>• Recognizes and presses keys on the keyboard</li> <li>• Moves text and images</li> <li>• Draws images using electronic tools</li> <li>• Inserts and edits texts, data, images, sound, video, and/or formulas</li> <li>• Recalls ICT vocabulary in context</li> <li>• Uses ICT vocabulary in context</li> </ul>	
<b>Analyze – Apply</b> (Believe)	<ul style="list-style-type: none"> <li>• Edits electronic work according to established criteria, conventions, and/or standards</li> </ul>	<ul style="list-style-type: none"> <li>• Prints files</li> <li>• Navigates between applications</li> <li>• Sends and receives text messages and electronic files using rules of etiquette</li> <li>• Transfers ICT knowledge to new applications</li> <li>• Inserts and edits texts, data, images, sound, video, and/or formulas</li> <li>• Formats text, images, graphs, tables using toolbar icons, menu options, keyboard shortcuts</li> <li>• Edits text using spell check, dictionary, thesaurus, grammar check, and/or track changes</li> <li>• Constructs graphic organizers, tables, spreadsheets, databases, multimedia presentations, and/or web pages</li> </ul>	
	<ul style="list-style-type: none"> <li>• Selects suitable ICT application and/or device to create electronic work and explains the selection</li> <li>• Revises electronic work to improve organization and clarity, enhance content and artistry, and meet audience needs, according to established criteria, feedback and personal preferences</li> </ul>	<ul style="list-style-type: none"> <li>• Recognizes and presses keys on the keyboard</li> <li>• Logs on and off ICT devices</li> <li>• Opens applications and files</li> <li>• Saves files</li> <li>• Formats text, images, graphs, and tables using toolbar icons, menu options, and/or keyboard shortcuts</li> <li>• Edits text using spell check, dictionary, thesaurus, grammar check, and or track changes</li> <li>• Inserts hyperlinks to electronic sources</li> <li>• Formats page layout</li> <li>• Customizes template of graphic organizer, table, multimedia presentation, spreadsheet, database</li> <li>• Analyzes the intended use of images/video, and edits images/video using photo/video-editing software</li> <li>• Constructs graphic organizers, tables, spreadsheets, databases, multimedia presentations, and/or web pages</li> </ul>	

## ICT - GRADE 8 - EXPANDING LEARNER (Grade 6 to Adult)

### Cognitive Domain

Outcomes	Achievement Indicators	
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>	
Produce to Show Understanding		Supporting Skills
<b>Analyze – Apply</b> (Believe) cont.	<ul style="list-style-type: none"> <li>Solves problems, reaches conclusions, makes decisions, and/or proposes answers to questions by analyzing data/information and concepts using ICT devices and/or applications</li> </ul>	<ul style="list-style-type: none"> <li>Navigates within an application</li> <li>Moves data between applications</li> <li>Transfers ICT knowledge to new applications</li> </ul>
<b>Synthesize – Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>Designs and creates non-sequenced ICT representations</li> </ul>	<ul style="list-style-type: none"> <li>Moves data between applications</li> </ul>
	<ul style="list-style-type: none"> <li>Self-assesses ICT representations to go beyond established criteria by enhancing meaning and/or artistry, according to topic, audience, purpose and occasion</li> </ul>	
	<ul style="list-style-type: none"> <li>Designs and creates simulations and models using ICT application</li> </ul>	
Communicate		Supporting Skills
<b>Knows Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>Displays and/or discusses electronic work</li> </ul>	<ul style="list-style-type: none"> <li>Logs on and off ICT devices</li> <li>Opens applications and files</li> <li>Navigates within an application</li> <li>Manages electronic files and folders</li> <li>Manipulates input devices</li> <li>Recognizes and presses keys on the keyboard</li> <li>Selects and uses peripherals to find, record, manipulate, save, print, and/or display information</li> </ul>
<b>Analyze – Apply</b> (Believe)	<ul style="list-style-type: none"> <li>Discusses information, ideas, and/or electronic work using tools for electronic communication</li> </ul>	<ul style="list-style-type: none"> <li>Sends and receives text messages and electronic files using rules of etiquette</li> </ul>
<b>Synthesize Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>Adjusts communication based on self-evaluation and feedback from a global audience</li> </ul>	
Reflect		Supporting Skills
<b>Knows Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>Participates in guided conferences to think about using ICT to learn</li> </ul>	<ul style="list-style-type: none"> <li>Uses ICT vocabulary in context</li> </ul>
<b>Analyze – Apply</b> (Believe)	<ul style="list-style-type: none"> <li>Invites and shares constructive feedback, related to established criteria, to reflect on using ICT to learn</li> </ul>	
<b>Synthesize - Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>Self-monitors learning goals, reflects on the value of ICT to complete learning tasks, and sets personal goals for using ICT to learn</li> </ul>	

## ICT – GRADE 8 – EXPANDING LEARNER (Grade 6 to Adult)

### Affective Domain

Outcomes	Achievement Indicators
<i>It is expected that students will:</i>	<i>The following set of indicators is used to assess student achievement for each related specific learning outcome. Students who have fully met the specific learning outcomes are able to:</i>
<b>Ethics and Responsibility</b>	
<b>Knows Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>• Respects ICT equipment and personal technology space of other ICT users</li> <li>• Recognizes guidelines for safety and security</li> <li>• Recognizes the need to acknowledge authorship of intellectual property</li> <li>• Identifies possible health issues associated with using ICT</li> </ul>
<b>Analyze – Apply</b> (Believe) cont.	<ul style="list-style-type: none"> <li>• Applies school division’s acceptable-use policy for ICT</li> <li>• Applies safety guidelines when communicating electronically</li> <li>• Explains consequences of unethical behaviour</li> <li>• Applies guidelines for ethical and responsible use of ICT</li> </ul>
<b>Synthesize – Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>• Evaluates effects of personal ICT behaviour on others</li> <li>• Weights personal benefits and risks of using ICT</li> </ul>
<b>Social Implications</b>	
<b>Knows Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>• Identifies uses of ICT at home, at school, at work, and in the community</li> <li>• Relates societal consequences of ethical and unethical use of ICT</li> <li>• Chooses appropriate times and places to use wireless games and/or communication devices</li> </ul>
<b>Analyze – Apply</b> (Believe) cont.	<ul style="list-style-type: none"> <li>• Analyzes current trends in ICT to predict effects of emerging technologies</li> <li>• Analyzes various ICT skill and competency requirements’ for personal career choices</li> <li>• Analyzes advantages and disadvantages of ICT use in society</li> </ul>
<b>Synthesize – Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>• Weighs society’s right to information access against right to individual privacy</li> <li>• Weighs benefits versus risks to society of creating new ICTs</li> </ul>
<b>Collaboration</b>	
<b>Knows Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>• Works with others in teacher-directed learning tasks using ICT and assists others with ICT knowledge and procedures</li> </ul>
<b>Analyze – Apply</b> (Believe) cont.	<ul style="list-style-type: none"> <li>• Collaborates with peers to accomplish self-directed learning with ICT in various settings</li> <li>• Collaborates with others over distance using ICT</li> </ul>
<b>Synthesize – Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>• Leads a group in the process of collaborative learning</li> <li>• Weighs benefits and challenges of collaborating on learning with ICT</li> </ul>
<b>Motivation and Confidence</b>	
<b>Knows Comprehends</b> (Become aware)	<ul style="list-style-type: none"> <li>• Demonstrates confidence and self-motivation while doing ICT tasks alone and with others</li> <li>• Recognizes ICT problems and seeks assistance to solve them</li> <li>• Recalls prior knowledge of procedures for troubleshooting and attempts to solve ICT problems</li> </ul>
<b>Analyze – Apply</b> (Believe) cont.	<ul style="list-style-type: none"> <li>• Investigates ICT problems and applies strategies to solve them</li> <li>• Preserves in working through complex ICT problems using higher-level thinking skills</li> </ul>
<b>Synthesize – Evaluate</b> (Value)	<ul style="list-style-type: none"> <li>• Synthesizes knowledge and information to solve unique ICT problems</li> </ul>



## AAT GRADE 9

### AAT Part A Narrative Writing –Test Blueprint

Reporting Category	Looking For...	Description of Writing Assignments
<b>Content</b> (selecting ideas and details to achieve a purpose)	Students respond to a given topic by writing a narrative or an essay. Students establish their purpose, select ideas and supporting details to achieve the purpose, and communicate in a manner appropriate to their audience.	The Narrative / Essay Writing Assignment requires students to respond to a prompt that consists of a topic, as well as a collection of materials that students may use if they wish. These materials include graphics, quotes, and short literary excerpts. Students may use ideas from previous experience and/or reading. Students are to respond by writing a narrative or an essay.
<b>Organization</b> (organizing ideas and details into a coherent whole)	Students organize their ideas to produce a unified and coherent narrative or essay that links events, details, sentences, and paragraphs, and that supports the purpose.	
<b>Sentence Structure</b> (structuring sentences effectively)	Students control sentence structure and use a variety of sentence types, sentence beginnings, and sentence lengths to enhance communication.	
<b>Vocabulary</b> (selecting and using words and expressions correctly and effectively)	Students choose specific words and expressions that are appropriate for their audience and effective in establishing a voice/ tone that will help to achieve their purpose.	
<b>Conventions</b> (using the conventions of written language correctly and effectively)	Students use conventions accurately and effectively to communicate.	

**Content and Organization are weighted to be worth twice as much as each of the other categories**

### AAT Part A Function Writing –Test Blueprint

Reporting Category	Looking For...	Description of Writing Assignments
<b>Content*</b> (thought and detail)	Students develop, organize, and evaluate ideas for a specified purpose and audience.	The Functional Writing Assignment requires students to write to a specified audience in the context of a business letter. They are also required to address a blank envelope correctly.
<b>Content Management*</b> (using the conventions of written language correctly and effectively)	Students communicate accurately and effectively by selecting words and phrases appropriate to their purpose. Students demonstrate control of sentence structure, usage, mechanics, and format.	

## AAT GRADE 9

### AAT Part B Reading – Grade 9: Test Blueprint

Reporting Category	Looking For...	Types of Reading Passages
<b>Identifying and Interpreting Ideas and Details</b>	Students construct meaning by interpreting ideas and details pertaining to setting / atmosphere / context / character / narrator / speaker (actions, motives, values, conflict, and events)	<p style="text-align: center;">There are various types of reading passages on the AAT:            Informational texts and narrative/poetic texts            Stories and poems            comprise almost 60% of the test.</p>
<b>Interpreting Text Organization</b> (Students identify and analyze literary genres)	Students identify and analyze the text creator’s choice of form, tone, point of view, organizational structure, style, diction, rhetorical techniques (e.g., repetition, parallelism), text features (e.g., alliteration, onomatopoeia, imagery, foreshadowing, suspense), and conventions.	
<b>Associating Meaning</b>	Students use contextual clues to determine the denotative and connotative meaning of words, phrases, and figurative language (e.g., simile, metaphor, hyperbole, personification, irony, symbolism).	
<b>Synthesizing Ideas</b>	Students draw conclusions and make generalizations by integrating information in order to identify the tone, purpose, theme, main idea, or mood of a passage.	

**AAT MATH GRADE 9  
TEST BLUEPRINT**

<b>Multiple Choice (MC) and Numerical Response (NR)</b>			
<b>Item Type</b>	<b>Number of Items</b>	<b>Number of Marks</b>	<b>Percentage of Test</b>
<b>MC</b>	40	40	80%
<b>NR</b>	10	10	20%
<b>TOTAL</b>	50	50	100%
<b>Content Domain of Test</b>			
<b>Strand</b>		<b>Percentage of Items on Test</b>	
Number		25 – 35%	
Patterns and Relations		30 - 40%	
Shape and Space		15– 25%	
Statistics and Probability		10 – 20%	
<b>Cognitive Domain of Test</b>			
<b>Complexity Level</b>		<b>Percentage of Items on Test</b>	
Low		30 – 40%	
Moderate		40 – 50%	
High		15 – 25%	