

Grade 4



Literacy Calendar

Grand Erie values languages and home cultures. We invite all our families and students to complete some of these activities in English, French, or their own first/home language.

Date

Activity

**Tuesday,
May 19**

Physical Activity is very important, especially during this time. View this info graphic from Stats Canada. What key information was shown in this info graphic? Did any facts surprise you or changed your thoughts on the topic? What do you think is the purpose of this infographic? Who would this be made for? How did the author use graphics to share the message? Is it a reliable source of information? What are the pros and cons to using this style of writing? What questions do you have about the topic?
www150.statcan.gc.ca/n1/en/pub/11-627-m/11-627-m2017034-eng.pdf?st=RqZC88VF

**Wednesday,
May 20**

Locate more infographics to look at. They are frequently found in newspapers, magazines, game instructions, recipes, neighbourhood signs. Compare yesterday's info graphic to what you found today. Talk about what is similar? What is different? What are some common features that an infographic should have?

**Thursday,
May 21**

Using what you learned about info graphics, create a list of possible topics you might want to create your own infographic about. What features would you need to include? Where could you find data and facts on that topic? Then choose one topic. Plan and create a rough copy of your infographic. Share your plans with a family member. Did they understand your message? Do you need to add more information?

**Friday,
May 22**

Today you will take the feedback from your family from yesterday and publish a final copy of your infographic. Share it with family and friends if possible. Talk about the purpose of infographics with family. Consider hanging it in your front window or mail it to a friend.

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SUCCESS for Every Student

Numeracy Calendar

Date

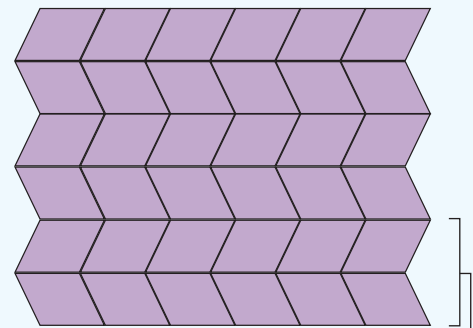
Activity

**Tuesday,
May 19**

It All Adds Up. You will need 2-3 dice, paper and pencil and a ruler or measuring tape for this game.
One player rolls two dice to create a two-digit number, that will now be used as the perimeter* in centimetres.
Roll the third die, and the number will be the length for one side of the shape.
Players draw as many shapes as they can matching the perimeter and one side length they rolled.
Players reveal their shape and score 1 point for each shape that fits the rules.
The next player now takes a turn rolling the dice.
The first player to score 10 points wins.
*Perimeter = the distance around the outside of the shape

**Wednesday,
May 20**

Can you find a *tessellation that uses reflections (flips)? E.g.
Hint: Check the geometric shape patterns you found a couple of weeks ago, such as curtains, sheets, walls etc.
*Tessellation: A tiling pattern in which shapes are fitted together with no gaps or overlaps. A regular tessellation uses congruent shapes.

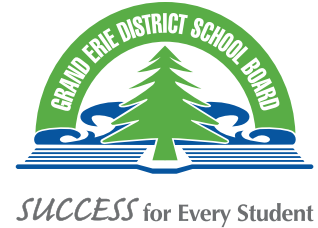


Reflection of rhombus

**Thursday,
May 21**

Explain why each statement is true or not true. Keep in mind the missing number is the same on each side of the equation.
1) $\Delta + 14 = \Delta + 13 + 1$
2) If $\heartsuit + 17 = 82$, then $\heartsuit + 15 = 80$

Grade 4



Numeracy Calendar

Date

Activity

**Friday,
May 22**

Which spinner would you say does not belong? Why? Does a member of your household have a different answer?



Sources:

Small, Marian. Math Up

Small, Marian. Leaps and Bounds. Grade 5/6

Small, Marian. Open Questions for the Three-Part Math Lesson. Measurement / Patterning and Algebra Grades 4-8

Small, Marion: Open Questions for the Three-Part Lesson; Number Sense and Numeration Gr. 4-8

Which Ones Doesn't Belong?; <https://wodb.ca/shapes.html> & <https://wodb.ca/graphs.html>

Ministry of Education: Ontario Mathematics Curriculum; Grade 1-8, 2005

<https://nrich.maths.org/eggsinbaskets>

<https://thelearningexchange.ca/wp-content/uploads/2017/01/Number-Sense-and-Numeration-1-3-Revised.pdf>

<https://mathclips.ca/swfPlayer.html?swfURL=tools/PatternBlocks1.swf&title=Pattern%20Blocks%2B>

Chain of Changes: <https://nrich.maths.org/221>

Three Block Towers: <https://nrich.maths.org/137>

<https://thelearningexchange.ca/wp-content/uploads/2017/01/Number-Sense-and-Numeration-1-3-Revised.pdf>

<https://oame.on.ca/eduproject/ontariomathedresources/files/Patterning%20and%20Algebra%20K-3.pdf>

Image of coordinate grid: <https://www.eqao.com/en/assessments/primary-division/assessment-docs/g3-geometry-spatial-sense-strand-2012-2016.pdf#search=geometry>

Four triangles puzzle: <https://nrich.maths.org/141>

Missing titles: <https://oame.on.ca/eduproject/ontariomathedresources/files/Data%20Management%20and%20Probability%20K-3.pdf>

Grade 4



SUCCESS for Every Student

Science

May 19 - May 22

Understanding Structures and Mechanisms – Big Idea:

Pulleys and gears change the speed, direction, and motion of, and force exerted on, moving objects.

Option 1

Pulleys

Watch the following video on pulleys from Britannica Encyclopedia: learn360.infobase.com/p_ViewVideo.aspx?xtid=74217&loid=358465&tScript=0

Think about your school, neighbourhood, and home. Craft a list of fixed and moving pulleys you see in these three locations. Using your own words, write a paragraph to explain how pulleys help to make work easier.

Option 2

How to Win a Bike Race: Using Gears

learn360.infobase.com/p_ViewVideo.aspx?contentID=-R0nshBIJXc&channel=MIT%20K12%20Videos&chnID=80

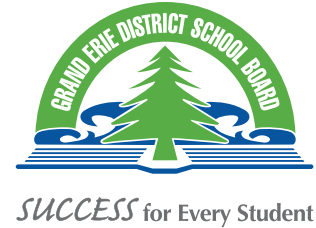
Step 1) Watch the first part of the video (stop at 2:20) and in your own words, explain how distance from the pivot point changes the amount of force needed to move an object. How do gears work together to create torque? What is the difference between how a large and small gear work using force and distance?

Step 2) Continue to play the video (stop at 3:20). The first cyclist must race using a big sprocket, or gear, while the second cyclist must use a small sprocket or gear. Predict which cyclist will win the race and explain your thinking.

Step 3) Watch the race and reflect on what happens (stop at 3:59). What did you notice about the speed each cyclist had to peddle? Who was ahead in the race at different points and why did this change?

Step 4) Watch the rest of the video and listen to the reflections shared. What have you learned about gears and how they use force to create movement? Where can we find gears in the world around us? How do gears help us in different ways?

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Science

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Option 3

Build and Explore

Here are some examples of machines that use pulleys and gears:

- **Pulleys:** clothesline, flagpole, garage door, blinds or curtains
- **Gears:** bicycles, classroom pencil sharpener, windup toy, insides of a clock or watch, can opener

Step 1) On paper, draw a plan and design for your own simple machine. Use at least one pulley and/or gear in your design. Make sure to make a list of the materials you will need to build your machine. Find materials (i.e. cardboard, plastic, paper, string, tape, etc.) by looking around your home and/or in your recycling bin.

Step 2) Build your simple machine that uses pulleys and/or gears to move small objects (i.e. a Lego person, a small rock, an eraser, etc.) a short distance of 1 meter. Explore large and small pulleys and/or gears to see how they move the load in different ways. Explain your findings in a paragraph.

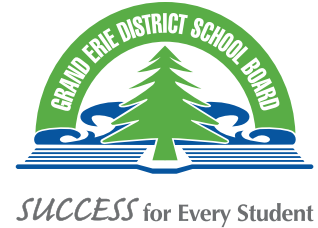
Step 3) Reflect on your work and learning. What challenges did you find in building your machine? Was your machine able to successfully move the load 1 meter? If you used small and larger pulleys or gears, what differences did you see? Write a paragraph reflection on your exploration and what you have learned about moving a load using pulleys and/or gears.

Students must have the appropriate supervision for safety when completing these science tasks. Adult participation is required for safety when completing some of the science tasks. If you have any concerns with completing these science tasks, please don't attempt them.

Prompts for discussion:

- What do you know or wonder about these terms or concepts? gears, pulleys, force, load, speed, rotation, torque, direction of movement, fixed pulleys, moving pulleys
- How are pulleys and gears used to improve your everyday life?
- How does the force need to move a load change when you change the size of the pulley or gear?

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Social Studies

May 19 - May 22

Heritage and Identity – Big Idea:

Not all early societies were the same. Explore a few different Indigenous Nations, their beliefs, and way of life.

Option 1

Mohawk – Giving Thanks

Visit www.fourdirectionsteachings.com/main.html.

After watching the introduction, click on the section focusing on the Mohawk teachings from Knowledge Keeper Tom Porter and listen to the information by selecting 'Morning Prayer' to learn about how traditional Mohawk people greet the day.

Reflection Questions:

- Brother Sun plays an important role in Mohawk teachings. Explain why thanks is given.
- What other things were mentioned that Mohawk people are thankful for?
- What are you thankful for today?
- Who are the people in your life who are important to you?
- What are the things that you have in life that you enjoy?
- Why is it important to give thanks to these people and to respect your things and others' belongings?

Source: www.fourdirectionsteachings.com/resources.html

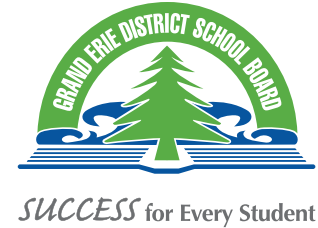
Write a paragraph explaining the importance of 'Morning Prayer' in the Mohawk tradition.

Option 2

Clan System

'Among the Haudenosaunee are groups of people who come together as families called clans. As a matrilineal society, each clan is linked by a common female ancestor with women possessing a leadership role within the clan. The number of clans varies among the nations with the Mohawk only having three to the Oneida having nine. The clans are represented by birds and animals and are divided into the three elements: water, land and air.

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Social Studies

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Option 2 Continued...

The bear, wolf and deer represent the land element, the turtle, eel and beaver represent the water element and the snipe, hawk and heron represent the air element.

Each member of a clan is considered a relative regardless of which nation they belong to. A wolf clan member of the Mohawk and a wolf clan member of the Seneca nation are still considered relatives. Family names and clans are passed down from mother to child.' 'In Haudenosaunee society each person has their own family, which includes their mother, father and brothers and sisters. But with this comes their extended family including everyone else belonging to the same clan. This system was especially helpful when traveling from nation to nation as people would search out members of their same clan who then would provide food and shelter and care for them as part of their family. ...The clan system still survives among those who follow the traditions.'

Source: www.haudenosauneeconfederacy.com/clan-system/
Explain in your own words how clans were, and still are, structured by the Haudenosaunee peoples.

Option 3

The Haudenosaunee and Agriculture

Browse the following links to explore and learn about agriculture and the Haudenosaunee.

The Forest and Clearing: www.historymuseum.ca/cmhc/exhibitions/aborig/fp/fpz3d02e.html

The Forest: www.historymuseum.ca/cmhc/exhibitions/aborig/fp/fpz3d03e.html

Changing Human-Plant Relationships: www.historymuseum.ca/cmhc/exhibitions/aborig/fp/fpz3d04e.html

The Clearing: www.historymuseum.ca/cmhc/exhibitions/aborig/fp/fpz3d05e.html

The physical environment affected how the early Haudenosaunee met their needs. Create a T-Chart to show the similarities and differences in how we live and find our food today.

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SUCCESS for Every Student

Social Studies

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Prompts for discussion:

- Who are the members of your family and how do you help each other?
- How is the clan system similar or different from your family structure?
- What might we learn from the Indigenous way of life?
- How have our lives today been impacted by early societies?