ELEMENTARY – GRADE 6

Week of April 6th 2020

Arnie the Doughnut

Information for students

- Go to https://youtube/6E67n1vZZjQ (15:04 minutes) to find the read-aloud of the book Arnie the Doughnut. Click on CC to see the subtitles.
- Arnie and Mr. Bing made lists of possible roles that Arnie could fill. Make your own list of roles for Arnie and make notes about why these ideas would work, or why not.
- What surprised you about this story? What do you think are some of the messages presented? Write a short reflection to help you organize your thoughts.
- Create your own story in which the main character is a type of food with human characteristics, like Arnie. Include dialogue so your readers will know what your characters are thinking and feeling. Illustrate your story. Read your story to your family, using different voices for each character.
- If possible, share your story with friends using video chat or another way that is approved by your parents.

Materials required

- Device with Internet access, paper, writing and drawing materials

Information for parents

Activity details

Parents could:

- Review the instructions with your child, if necessary.

Une description de ton ami(e)

Information for students

- Prends ta photo de classe ou une photo de ton (ta) meilleur (e) ami (e).
- Décris ton ami (e).
- Tu peux écrire sur une feuille ou à l'ordinateur.
    - Quel est le nom de ton ami(e)?
    - Où l'as-tu rencontré(e)?
    - Où habite-t-il (elle)?
    - Pourquoi est-ce que c'est ton ami(e)?
    - Quelle est sa plus grande qualité?
- Tu peux envoyer la description de ton ami(e) par courriel à celui-ci (celle-ci).

Materials required

- Une photo de ta ou de ton meilleur (e) ami(e);
- Une feuille et un crayon.

Information aux parents

À propos de l'activité

Votre enfant s'exercera à :

- Développer son sens de l'observation;
- Écrire des phrases complètes à l'aide de mots connus.

Vous pourriez :

- Aider votre enfant à composer des phrases complètes.

Math BINGO!

Information for students

- Cut out the mathematical expressions from the sheet entitled “Expressions to Place on the Card”. Then place them in any order on your bingo card.
- An adult will read out a mathematical expression (for example, “6^4”). Find the equivalent expression (in this case “6 x 6 x 6 x 6“) and colour in the space where it appears on your bingo card.
- The goal is to colour in all the spaces in a line. If you have time, you can play until you colour in the whole card.

Materials required

- The bingo cards and the mathematical expressions (see Appendix):
- A pair of scissors, glue stick or tape (optional)

NOTE: If there are several players, each player must place the expressions in different spaces so that the bingo cards are different from one another.

Information for parents

Activity details

The goal of this activity is to find the mathematical expressions equivalent to given mathematical expressions containing an exponent. This activity can be carried out with Grade 5 and Grade 6 students.

For this activity, parents can print the “Math BINGO!” card with the instructions for the children or make a similar card by drawing a grid (five columns by five rows) on a sheet of paper. The children must cut out the expressions from the sheet entitled “Expressions to Place on the Card” and place them in any order on their bingo card. They could also copy them out in any order on the bingo card.

Parents will read out the mathematical expressions (sometimes called “mathematical sentences”, for example, “64”, which reads “6 to the power of 4”) one at a time. The children must then determine the expression equivalent to the one read out by the parent and colour in the space where it appears on their bingo card. Parents can also play. The first person to colour in all the spaces in a horizontal, vertical or diagonal line wins the first part of the game. The game then continues until someone colours in their entire card.

Parents could:

- have their own bingo card to play with their children
- check the solution for each expression they read out
- ask the children to find the answer to each mathematical expression on the bingo card
- allow their children to use paper, pencil and multiplication tables to do their calculations or to use a calculator

Annexe – Math BINGO!

B	I	N	G	O
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FREE				
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Instructions for the children:

- Cut out the expressions from the sheet entitled "Expressions to Place on the Card". Then place them in any order on your bingo card.
- An adult will read out a mathematical expression (for example, "6^4"). Find the equivalent expression (in this case"6 x 6 x 6 x 6") and colour in the space where it appears.
- The goal is to colour in all the spaces in a line. If you have time, you can play until you colour in the whole card!

Appendix –Expressions to place on the card

1x1	6x6	1x1x1	6x6x6
2x2	7x7	2x2x2	7x7x7
3x3	8x8	3x3x3	8x8x8
4x4	9x9	4x4x4	9x9x9
5x5	10x10	5x5x5	10x10x10

Appendix – Mathematical Expressions

1^2	6^2	1^3	6^3
2^2	7^2	2^3	7^3
3^2	8^2	3^3	8^3
4^2	9^2	4^3	9^3
5^2	10^2	5^3	10^3

Instructions for the adult:

- Read out the mathematical expressions to the children in any order.
- You can read the exponent 2 as "squared" and the exponent 3 as "cubed".
- Colour them in to keep track of each one you read out.
- This will help you check the results of the operations when a child calls out BINGO!
- Have fun!

The Rube Goldberg Machine

Information for students

- Become familiar with what you are being asked to do and with the instructions you must follow in this activity. If you want, make a video showing what your Rube Goldberg machine can do and share it with your friends.
- See student's document for more information (Appendix).

Materials required

- Various household objects that are safe to use and lots of recyclable items. (No need for a workshop or a garage: keep it simple!) Here are a few examples of Rube Goldberg machines: https://www.youtube.com/watch?v=dFWHbRApS3c.

Information for parents

In this activity, children will do some research in order to build a small Rube Goldberg machine. In building this technological object, they will examine the concept of cause and effect.

This activity can also be carried out with Grade 5 students. If a family has children in both grades, this is a good opportunity for them to work together.

Watch out! One of the rooms in the house could turn into a construction site. 

The children could try carrying out this activity on their own. However, parents who wish to can help them:

- choose the objects to be used (toilet paper roll, small wooden or plastic planks, string, rubber bands, marbles, balls, sticks, rods, straws, sheets of paper, cardboard, pieces of wood, etc.)
- figure out how to assemble, cut or make a hole (nail, thumbtack, scissors, glue, adhesive paper, paper clip, etc.)
- think about the actions that must take place (what must happen to make a ball or marble roll, fall, move up, turn?)

Of course, any encouragement on the part of parents is more than welcome.

Credits: This activity was adapted from the document prepared by teachers and education consultants as part of the *EnScience pour la réussite* project carried out by the regional forum in the Capitale-Nationale region.

Appendix – Discovering Rube Goldberg Machines

Rube Goldberg was an American cartoonist and inventor who was trained as an engineer. He liked to design complex machines to perform simple tasks. His machines involved a series of steps (actions) aimed at achieving a specific goal.

Click *here* to see what Rube Goldberg machines look like.

Part 1: Introduction

After watching the videos, what can you say about Rube Goldberg machines?

If you were paying close attention, you noticed that the goal of the first machine is to make a marble drop into a container, whereas the other machines are designed to make a bell ring. For this to happen, a series of events must take place. Each event in the series is a step that keeps the machine in operation. At each step, objects are set in motion (they roll, they fall, they move down, etc.) by the action of other objects. This series of actions can be explained by the principle of cause and effect.

Part 2: Analyzing the Rube Goldberg Machine

Let's take a closer look at the first few steps (actions) in the first video.

A cup containing a marble stands on a small car held by a hand. The hand lets go of the cup, and the car rolls to the bottom of the binder. Since there is a slope (cause), the car rolls to the bottom (effect). In the second step, the cup falls over, and the marble rolls along a plank. When the car hits the plank (cause), the cup falls over (effect). Because the cup falls over (cause), the marble rolls along the plank (effect). The steps occur one after the other until the goal is achieved.

Part 3: Build your Own Rube Goldberg Machine

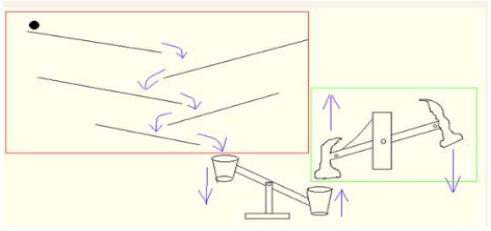
Build a Rube Goldberg machine that achieves a goal in two or three step (actions).

For example, it must make a ball go into a cup. Use materials you have at home.

Think about the goal and then the different steps that must be carried out to achieve it. These steps will consist of a series of actions (the causes and effects) aimed at achieving the goal.

Try thinking about the actions that you might want the objects to perform rolling, falling, pulling, hitting, sliding, lowering, turning, going down, going up, swinging, bouncing, breaking, etc.

Have fun!



Defining the word “sedentary”

Information for students

- Watch the video Applying Physical & Health Literacy.
- Define sedentary in your own words. Ask an older member of your family what they think of your definition.
- Do you think your lifestyle is sedentary?

Materials required

- The video Applying Physical & Health Literacy (please watch only the first minute and 10 seconds)

Information for parents

This activity allows students to define the word “sedentary” and identify whether or not their personal lifestyle is sedentary.

Activity details

In this activity, children will practise:

- be able to define “sedentary” in their own words
- identify whether or not they think their personal lifestyle is sedentary

Parents could :

- ask their children questions, provide examples of behaviour associated with the regular practice of physical activities and with time spent looking at a screen

Make a plan, get moving, take a moment to reflect

Information for students

- Plan the physical activities you will carry out this week.
- Carry out the physical activities you planned.
- What was the intensity level of the physical activities you carried out? Was the intensity of a specific activity particularly low, high or moderate?

Materials required

- Depending on the activity.[1]

Information for parents

Activity details

In the context of the current pandemic, the physical and social environment in which physical activities or active play are carried out must comply with the most recent guidelines issued by the Direction de la santé publique or by any other relevant authority.

This activity allows children to carefully plan their physical activities and think about the planning process at the end.

In this activity, children will practise:

- plan the physical activities they will carry out during the week
- carry out the physical activities they planned
- be curious about the intensity of the physical activities

Parents could:

- carry out the activities with their children, or alternate between supervision and independent play, depending on the activity

[1] Based on the materials available at home.

Unavailable

Unavailable

Changes in Québec

Information for students

Spark your interest in learning:

A. Contact someone you know who was a teenager or an adult in the 1980s.

B. Ask this person about the following subjects to learn about how things were in the 1980s:

   a. Cultural elements: religions, beliefs, arts, languages, food, fashion, entertainment, customs

   b. Economic activities

   c. Modes of transportation

   d. Technology and communications

C. Based on your findings, identify the area of activity that has changed the most since1980.

Take it to the next level:

A. Refer to the document *Québec Society Between 1905 and 1980*, which describes different areas of activity in Québec during this period: transportation, communications, hydroelectricity, health, etc.

Identify the area of activity that has changed the most since 1905.

Materials required

Useful resources, depending on personal preferences and availability:

- writing materials (paper, poster board, pencils, etc.)
- printer
- device with Internet access

Information for parents

In Geography, History and Citizenship Education, students are asked to identify the causes and consequences of changes. A cause could be a goal, motive or reason that explains the changes. A consequence is the effect of a cause, the result of an action that might be positive or negative, depending on the aspects addressed and the groups concerned.