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Descriptive Words

Information for students

Writers can create pictures, ideas and feelings using just the right words. Watch the video and think about the words that clearly and effectively describe what you see, think and feel.

Instructions

- Watch this video of unconventional domino tricks: https://safeyoutube.net/w/hVSE
- Make a list of at least 12 carefully chosen words that describe the **visual** aspects of the tricks, what you are **thinking** and how you are **feeling** while you watch this.
- Invite someone else to watch the video. Ask this person to make a list of carefully chosen words that describe the domino tricks.
- Together, compare the two lists and talk about your choice of words.
  - Which words were the same?
  - Which words were different?
  - Which words from their list would you add to yours? Why?
  - Which words from your list would they add to their list? Why?
- With your partner, use a paper or online dictionary or thesaurus to research other words that would be effective. Add these to your list.
- Discuss your ideas about the power of words.
- Edit your final list for correct spelling. Give your list a title.
- Place your writing in the folder or notebook where you keep all your writing.

Materials required

- Device with Internet access
- Paper and pencil or pen
- Paper or online dictionary or thesaurus

Information for parents

Children could:

- choose a photograph, advertisement or piece of art, if Internet access is not available

Parents should:

- read the instructions with your child, if helpful
- help navigate online resources, if necessary
- engage in a discussion with your child about the activity

Potager

Consignes aux élèves

Tu sais ce qu'est un potager? Un potager est un espace de terre que l'on cultive pour avoir de beaux fruits et légumes durant l'été et à l'automne. Souvent, on donne le nom de « jardin » à notre potager.

- Comme le printemps arrive, il est temps de planifier l'organisation de ton potager. Si tu veux commencer à faire pousser tes légumes, regarde cette vidéo.
- Si tu as envie d'attirer les papillons dans ton jardin, clique ici pour savoir quoi planter.
- Quel légume planter à côté de quel autre? Est-ce une bonne idée de planter des tomates qui mesurent de 1 à 2 mètres de hauteur juste devant les petits plants de laitue?
  La laitue aura-t-elle assez de soleil? Quelle distance doit-on laisser entre les plantes?
  Pour savoir où planter tes légumes, consulte le site suivant.
- Planifie l'organisation de ton potager en faisant un plan : indique où tu vas planter chaque légume en pensant à l'orientation du soleil et aux combinaisons de plantes.
  Combien d'espace devras-tu laisser entre chaque plante?
  Pense à la taille des plantes à la fin de l'été. Voici un exemple de plan.
  Tu peux t'en inspirer pour créer le tien avec les légumes que tu auras choisis.
- Colorie ton plan et indique toutes les dimensions.
- De quel matériel auras-tu besoin? De l'eau? Du compost? Des tuteurs? Fais une liste.
- Présente le plan de ton potager à ta famille. Prépare-toi à expliquer tes choix.

Matériel requis

- Ordinateur avec accès à Internet ou livres de jardinage;
- Papier quadrillé ou blanc, règle, crayon, crayon de couleur

Information for parents

Children could:

- gather information on gardening and garden plants
- plan the organization of their garden
- draw the plan of their garden and make a list of the material that will be needed
- present their plan and explain the choices made

Parents should:

- help their child find and understand information on garden plants
- help their child to draw the plan of their garden
- ask their child questions to help him/her adjust the choices made

Exploration of Perimeter and Area

Information for students

- Imagine you have a piece of land that measures 24m^2, and you want to build a fence around it. What could the dimensions of the land be? List all the possibilities. What is the length of the fence that would be needed for each possibility?
- Now imagine you have a fence 60 m in length. What is the largest area of land that you can surround with the length of fence that you have? What is the smallest area of land that you can surround with the length of fence that you have?
- Draw your possible solutions on the grid paper provided.

Materials required

- Paper, pencil
- Grid paper

Information for parents

About the activity

Parents should:

- Help their child understand that perimeter and area are different measures of the same shape perimeter measures the distance around the shape and is measured in linear units, while area measures the space inside the shape and is measured in square units

Appendix – Exploration of Perimeter and Area

Information for students

- Imagine you have a piece of land that measures 24m^2, and you want to build a fence around it. What could the dimensions of the land be? List all the possibilities. What is the length of the fence that would needed for each possibility?
- Now imagine you have a fence 60 m in length. What is the largest area of land that you can surround with the length of fence that you have? What is the smallest area of land that you can surround with the length of fence that you have?
- Draw your possible solutions on the grid paper provided.

Gravitational Attraction

Information for students

- Consider these questions:
    1. When you jump up, why do you come down and not just continue towards space?
    2. Do astronauts weigh the same on the moon as they do on Earth? *Explain*
- Watch the video: Down to Earth
- Important terms when talking about gravitational attraction are**:**
    - **Force:** a push or pull acting on an object
    - **Gravity:** an invisible force of attraction between objects with mass
    - **Mass:** the amount of matter an object has
    - **Weight:** the amount of pressure an object exerts on another object due to gravitational pull
- You can find out more about gravitational attraction by reading the information provided in Appendix A
- Once you think you understand, test your knowledge with the activity in Appendix B!

Materials required

- Electronic device
- Pencil
- Paper
- Calculator

Information for parents

About the activity

Children should:

- deepen their understanding by watching this video:The Great Escape

Parents could:

- ask their child to explain the difference between mass and weight
- ask how distance affects gravitational pull
- ask how mass affects gravitational pull
- check their child's work in Appendix A

Appendix A – Understanding Gravitational Attraction

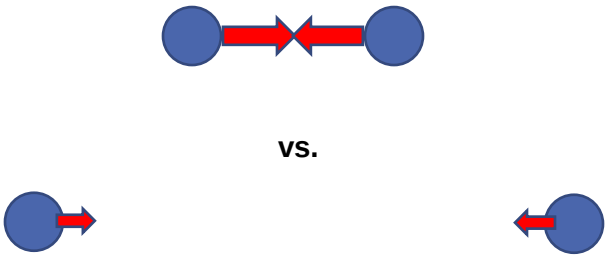
Information for students

- Gravity:
  - Gravity exists between two objects with mass (e.g. you and Earth)
  - Gravity is a force that pulls you and other objects towards the Earth's center
  - If there was no gravity, all the objects not attached to Earth would float off into space
- How does the mass of an object affect its gravitational pull?
  - The mass of an object affects its gravitational pull (mass = the amount of matter an object has)
    - ❖ **Objects with <u>more mass</u> have <u>more gravitational force</u> than those with less mass.**

  - Gravitational pull exists between all things (e.g. you and Earth, you and the computer, a chair and a table). It is an invisible force that is between all objects with mass
  - Why are you pulled towards the Earth and not towards the table, the computer, or the chair? That's because Gravity has a stronger pull on an object with <u>a large mass</u> (e.g. a planet). Because Earth has a large mass, all objects are affected by its gravitational pull
  - Gravity is the force that keeps the moon in orbit around Earth and all the planets in orbit around the sun. Without gravity, these celestial bodies would no longer revolve around the sun but, instead, fly out of their orbital path

- Each planet has a different gravitational pull. Can you reason why? Remember: the amount of mass an object has affects its gravitational pull

- Think about a dog whose weight is 100lbs (45kg). If the dog travels to Jupiter, will it still weigh 100lbs or more or less? Remember: weight is the pressure an object exerts on another object due to gravitational pull. An increase in gravitational pull creates an increase in an object's weight
- How does the distance between two objects affect gravitational pull?
  - The distance between two objects affects gravitational pull
  - The greater the distance between two objects, the weaker the gravitational force between them

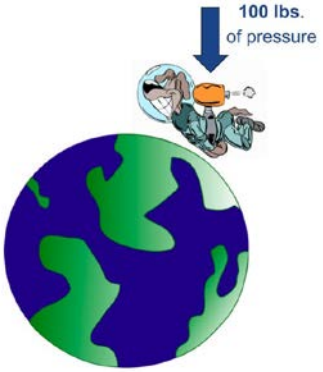


  - If you weighed yourself on a scale in Death Valley, California, USA (the lowest point in North America), to measure how much pressure you are putting on the ground, and then flew to Nepal, to the top of Mount Everest, and weighed yourself again on the same scale, would your weight be the same?
  - **As you travel away from Earth's center, the gravitiational pull decreases**. Therefore, even though your mass is the same (made of the same amount of matter), the pull on you becomes weaker and weaker and you weigh less and less.

- The same is true of a rocket ship leaving Earth. Since a rocket ship starts from the ground (and has a lot of mass), it needs a very strong thrust to go against Earth's gravitiational pull. However, as the distance between the rocket and the Earth increases, the rocket needs less and less power, since the Earth's gravitational pull becomes weaker and weaker

- Watch the video: Over to the Moon
- What is the difference between mass and weight?
  - **Mass is the amount of matter an object has**. For example, you are made of matter and, therefore, we can measure the amount of matter you possess, which is called your mass
  - **Weight, on the other hand, represents the amount of pressure you put on the surface because of Earth's gravitational force.** If you travel to another planet that has a different gravitational force value (higher or lower), the amount of pressure you put on that planet's surface will be different. However, your mass will remain the same, right? **As you travel from one planet to another, your weight changes, but your mass stays the same**

Appendix B – Weight on Other Planets



Information for students[1][2]

1. Spike's mass is 100lbs (45kg). If he travels to each celestial location in the chart below, can you predict what his weight will be in each location?
2. Use the chart[3] below and the following formula (in red) to calculate Spike's weight in the different locations.

Mass x Gravity = Weight

Celestial Location	Mass(stays the same)	Gravity	Weight
Earth	100lbs (45g)	**1**	100lbs (45kg)
Moon		**.166**	
Outer Space		**0**	
Mercury		**.38**	
Venus		**.91**	
Mars		**.38**	
Jupiter		**2.14**	
Saturn		**.91**	
Uranus		**.86**	
Neptune		**1.1**	
Pluto		**.08**	
The Sun		**28**	

[1] "Globe" *n.d.*, PNG, http://www.freestockphotos.biz/stockphoto/16901
[2] "Space Dog" n.d. JPEG, https://www.publicdomainpictures.net/en/view-image.php?image=179934&picture=space-dog
[3] David R Williams, NASA, "Planetary Fact Sheet Ratio to Earth," last modified October 21 2019, https://nssdc.gsfc.nasa.gov/planetary/factsheet/planet_table_ratio.html.

1. Review the picture below and the chart above, and explain the relationship between an object's mass and its gravitational force.

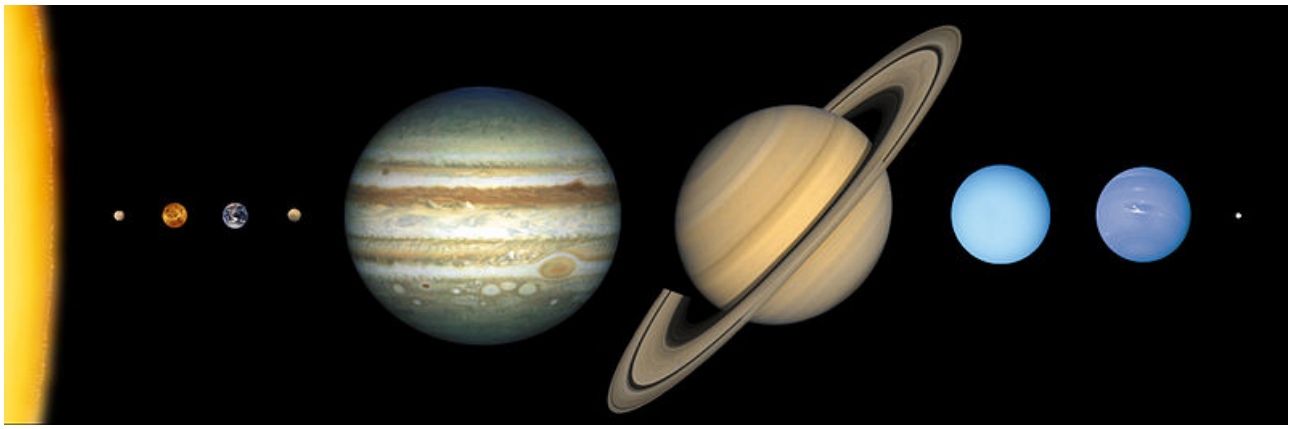
_____

_____

_____

_____

Relative Size of Celestial Bodies[4]



1. Spike weighs more on _____ than on _____, because _____

_____

2. Spike could jump further on _____ than on _____, because _____

_____

[4] Tryphon, "Solar System Scale," November 1, 2009, JPEG, https://commons.wikimedia.org/wiki/File:Solar_system_scale.jpg

Preparing for High School: Self-Reflection

Information for students

Last week we explored similarities and differences between elementary school and high school. To be better prepared for your transition to high school, it is important to think about some of the personal characteristics that will help you be successful.

- The image below is a collage of character traits. Choose three of your best character traits and write them down. Beside each one, write a sentence about how this trait will help you be successful in high school
- Now choose three of your traits that might make it more difficult to be successful in high school. Beside each one, write a small plan or goal for how you can improve on that trait

We all have personal characteristics that we can improve on. This is an opportunity to reflect on ourselves and plan for success!

Materials required

- Paper
- Pen or pencil

Information for parents

- Help your child choose the character traits they possess from the image below
- Discuss the importance of some traits over others in order to be successful in high school
- Help your child come up with a plan or goal to improve on some traits
- Refer to this activity again before they start school in September
- This is an opportunity for personal reflection and preparing for high school

Means of Transport Across Time[5]

Information for students

When learning about a territory, it is useful to understand the means of transport that allow for the movement of people, animals and goods from one location to another. The means of transport used in a territory are often related to territorial characteristics (such as the location of villages, the existence of roads or major waterways, or varying weather conditions). For example, airplanes are sometimes used to travel between villages that are isolated and have no roads connecting them.

Instructions:

- Consider the means of transport used on the territory of present-day Quebec. How might territorial characteristics affect the means of transport used? (For example, are certain means used more in winter than in summer? Do some regions use certain means of transport more than others? Why?) Discuss your ideas with a parent or a friend. Complete the table in Appendix 1
- Now take a historical perspective. Consider how means of transport have changed in Québec over time
- Using your available resources, complete the table in Appendix 2 to situate in time the emergence of different means of transport on the territory of present-day Quebec.

Materials required

Useful resources, depending on personal preferences and availability:

- Digital device with an Internet connection (optional)
- Writing and creative materials (paper, cardboard, pencils, mini building bricks, etc.)
- Printer

Information for parents

Students could do research using books or the Internet to build their background knowledge on the topic.

Parents should read the instructions with their child and review with them how to complete the tables in the Appendix.

[5] This activity is an adapted translation of a lesson developed in collaboration with the GRUS.

Appendix 1 – Means of Transport in Present-day Québec

Information for students

Identify different means of transport (eg. skateboards, cars) used on the territory of present-day Québec.

Means of transport:

How might territorial characteristics affect the means of transport used? (For example, are certain means used more in winter than in summer? Do some regions use certain means of transport more than others? Why?) Discuss your ideas with a parent or a friend. Complete the table below.

Territorial characteristic	Impact on the means of transport used
Climate (ie. the weather)	
Location of village	
Existence of bodies of water (ie. rivers, lakes)	

Appendix 2 – Situating Means of Transport in Time

Information for students

Using your available resources and the table below, situate the following means of transport according to the time period when they began to be used in what is now Québec.
automobile - plane - steamboat - bicycle - horse-drawn carriage - canoe - horse - train - snowmobile - skateboard – electric car - snowshoes – school bus – toboggan – taxi

Time period	Means of transport
Before 1600s	
1600s	
1700s	
1800s	
1900s	
2000s	

Bonus Question: Why do you think the means of transport used in Québec changed over time?