Continuation of Learning – Week Six!

Ms. Sadler Mean, Grade 8 Homeroom

Don't forget:

*daily lunches are available at the Diner Down Under for families in need! Feel free to stop in around 12:30 P.M.
*I've sent the suggested weekly learning activities as a PDF link, but you can also access it and other activities at the BCS Website!
*CNHS needs your shirt size information for T-Shirts for next year. An email with the link has been sent by both Mr. Hemphill and myself.
* Families for whom technology for learning is non-existent or challenging, you are invited to sign up for an education supplement to be delivered a Saturday paper. Call 1-844-615-7542 and provide delivery information.

Literacy: This week's theme for the lessons is *The Five Senses*.

Young writers often struggle to show rather than tell, which is something that I have stressed often in class. The idea is to create mental pictures through triggering our five senses with powerful yet accessible descriptions.

For instance, avoid saying that someone was mad, or sad, or scared. *SHOW US* anger, sadness and fear by what the characters are saying or doing (such as, the character's eyes get wide and his breathing gets shallow… his pulse quickens, and his mouth goes dry). This description denotes some kind of distress, but I did not use the words "mad," "sad" or "scared" at all!

To Do: Create a whole-page description of a time when you experienced a powerful emotion – intense anger, guilt, fear, happiness, relief, etc. Be as descriptive as possible! Tell me about your breathing, the sound of your heart, the thoughts that flash through your mind, what did you do with your hands, your feet, etc. *I'd love to read them when you're done!!*

Also: create a descriptive piece to explain the following image. Be as creative as possible! Aim for a half-page or longer:

Science:

Good observers use all their senses - not just their eyes. Observing your surroundings is an important skill in science as it helps you to be scientific. Using our eyes and our ears helps us to make sense of the world around us and they also help us to learn about science.

Here is an amazing link to dozens of cool experiments dealing with the five senses:

http://www.lovemyscience.com/cat_senses.html

One of them encourages you to make a pinhole camera because seeing is believing!

Materials you will need:

- Tin can with small hole at sealed end
- Small piece of card
- Large sewing needle
- Scotch tape
- Small nail
- Hammer (optional)
- Wax, parchment or tracing paper
- Rubber band
- Light bulb (filament)

Steps

1. Either puncture the sealed end of a tin can using a hammer and small nail (be sure you have adult supervision)

2. Cut out a square piece of wax paper slightly bigger that the end of the tin can so that you can wrap it completely around the end of the can.

3. Place the wax paper over the open end of the tin can and place a rubber band around it to hold it in place

4. Cut out a small piece of card to place on top of the small hole that you made at the other end of the tin can.

5. Using a large sewing needle make a tiny hole in the piece of card and place the pin in the hole and tape it to the tin can. (remove the sewing needle).

6. Turn on you filament light bulb and hold your pinhole camera so that the tiny hole side is closest to the light bulb and look at the wax paper to see if you can see the image of the bulb on the wax paper.

A pinhole camera is a simple camera without a lens and with a single small aperture is basically a light-proof box with a small hole on one end. Light from a scene passes through the small hole and projects an upside-down image on the opposite side of the tin can or box. In bright lights our eyes acts similarly, as do cameras using small apertures.

The principle of a pinhole camera is that light rays from an object pass through a small hole to form an image.

Up to a point, the smaller the hole, the sharper the image, but the dimmer the projected image.

Solargraphy is to capture the movement of the sun over a long period of time by using a pinhole camera.

Try doing this experiment outside using the lighting from the sun but do not look directly into the sunlight.

Social Studies

The five senses are greatly altered in space. Watch this video clip created by the Canadian Space Agency and narrated by Canadian astronaut Chris Hadfield. Each subsequent sense can be clicked on the *Up Next* column. As you watch, listen for the answers to the following questions:

1. Do astronauts prefer spicy or salty food, why or why not?
2. What happens to some astronaut's eyeballs in space resulting in blurred vision?
3. True or False: you can't hear a scream in space?

https://www.youtube.com/watch?v=dyt8WFdzhMU

Have you ever wondered about what it would feel like to walk on the moon, or how cold your feet might get swimming around in space? The footprints left behind by American astronaut Neil Armstrong in 1969 are still visible today on the moon today! *Why* do you think that is?

Two young Fredericton students invented two separate items to help astronauts in space. Watch the clip and read the article to answer the following questions:

https://www.cbc.ca/kidsnews/post/watch-check-out-the-best-new-inventions-for-space-by-kids

1. Why did Connor Brown design the boots the way he did?
2. What is the point of the Canada mini arm? Why is it needed in the first place?
3. Why is it important for Canada to still be in the "space race" along with other countries?
4. Challenge: now that you know a little bit about taste, sight, touch, smell, and sound in space, create your own invention that will make life easier for astronauts!

DID YOU KNOW??????? Five Senses Edition!

1. **Your eyes will process 24 million images in your lifetime**: Overall, they contribute toward 85 percent of your knowledge. Simply put, they're responsible for setting up how we react to the environments in which we live.
2. **Your eyes can recognize candlelight from up to 14 miles away**: Of course, this can only be done under perfect conditions, but it's impressive, nonetheless. Your eyes are the strongest muscles in your body relative to their duties, and they function at 100 percent capacity. Capabilities such as this one proves they're one of the most powerful tools possessed by humans.
3. **You can smell about 10,000 odors**: Although our sense of smell is inferior to the sense of smell possessed by animals, many of which have

inferior eyesight anyway, we're still capable of detecting a multitude of odors using the nose's olfactory receptor neurons. Those receptors are each encoded with a unique gene; if you lack a gene, then you lack the ability to detect that smell.

4. **Eighty percent of what we experience as taste is actually smell**: It's common knowledge that smell affects taste. Every child has held their nose to avoid tasting nasty food they were forced to eat by their parents. Such a behavior hinders odor molecules from reaching the smell cells in your nose, enabling you to skip the displeasure that comes with eating what you don't like.
5. **Your sense of smell is closely linked to your memory**: Part of the brain's limbic system, the olfactory bulb accesses the hippocampus and amygdala, which are responsible for associative learning and emotion respectively. People often link smells to events from the past as a conditioned response, a result of that smell being repeatedly paired with an experience.

Source: https://www.nursingschools.net/blog/2011/06/15-fascinating-facts-about-your-five-senses/

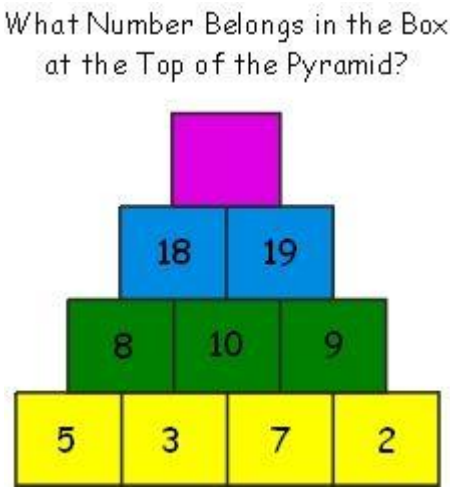
Numeracy :

Here is a terrific Canadian Interactive Website that allows students to check their own understanding! You can always back up a year or two, or even move onto grade 9 work as a challenge!

Check it out at https://ca.ixl.com/math/grade-8

This second website offers **free video tutorials** before each set of practice questions! Great for those who need a refresher:
https://www.studypug.com/ca/grade8?camp_id=274470753&grp_id=1197368412035607&kw=%2Bgrade%20%2Beight%20%2Bmath&query=grade%208%20math%20word%20problems%20pdf&mt=b&bmt=bb&clkid=a953a6a70fd01343224ef80eb0eb0801&loc=5142&int=&kwid=74835646579341&sour ce=o&tgt=kwd-74835646579341:loc32&device=c&adid=74835570661447&feed_id=&msclkid=a953a6a70fd01343224ef80eb0eb0801&utm_source=bing&utm_medium=cpc&utm_campaign=CAN%20-%20Math%20-%20Broad%20Match&utm_term=%2Bgrade%20%2Beight%20%2Bmath&utm_content=Gr%208%20- %20!Head%20term

Finally, here are a couple of Math Challenge puzzles for this week: Email me your answer and I'll let you know if you're right!! I'd also love to hear how you figured it out (see image below).



The answer to last week's puzzle was 68! The first two numbers had a difference of ten, the second two had a difference of twenty, and the third batch had a difference of thirty!