# 8th Grade Distance: Distance Learning Activities

April 13 - April 17 Lesson Plan for Grade 8 Science Prepared by Mr. Mapes - Office number (480)744-4974 Office hrs 8am - 4pm M-F

# **MONDAY - Graphing Vocabulary**

1. Identify the following Terms related to graphing

Axis, Variable, Independent Variable. Dependent Variable, Control

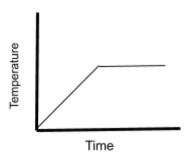
2. Identify the best use, and draw each of the following types of graphs. Make up your own data for each graph.

Pie Graph, Bar Graph, Line Graph

# **TUESDAY - Question Analysis**

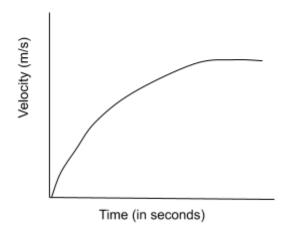
Answer the following question. Either post to GC or save in your science binder.

Suzy placed a pot of water on the stove and heated it for 10 minutes. She took the temperature of the water several times throughout the 10 minutes and recorded the data. Suzy claims that the graph below shows the relationship between temperature and time while the water is heating.



- 1. Which statement best explains why the temperature leveled off in the graph?
  - a. Suzy turned the stove off so the water didn't get hotter.
  - b. The water reached a boiling point, so the water no longer got hotter.
  - c. Something went wrong because the water temperature should keep increasing.
  - d. Cold water heats faster than warm water, so once the cold water was room temperature it took more than 10 minutes to make it hot.
- 2. Justify why you chose that answer.

# **WEDNESDAY - Question analysis**



- 1. According to the graph, the acceleration of the object is:
  - a. Constant
- b, Decreasing
- c. Increasing
- d. Zero

2. Justify your answer.

# THURSDAY - Model Building

Look in your freezer, fridge, and pantry. On a seperate sheet, make a PIE CHART with the following information:

- 1. Number of items stored in cans.
- 2. Number of items stored in hard plastic containers.
- 3. Number of items in jars.
- 4. Number of items in plastic bags.

Make sure to turn the number of items into a percent for your chart. Create a title that makes sense to what information you collected.

# FRIDAY - Game Day!!

The day you all have been waiting for...

- 1. Live Kahoot! At 10:00 AM.
- 2. I will post the game code in the google classroom and send it out through Remind.
- 3. You must include your name somewhere in your game name.

# 8th Grade Distance: Distance Learning Activities

April 20 - April 24 Lesson Plan for Grade 8 Science

Prepared by Mr. Mapes - Office number (480)744-4974 Office hrs 8am - 4pm M-F

### **MONDAY - Vocabulary Genetics**

- 1. Identify the following terms related to genetics
  - a. Gene
  - b. Alleles
  - c. Dominant and Recessive
  - d. Genotype and Phenotype
  - e. Homozygous and Heterozygous

# **TUESDAY - Question Analysis**

Answer the following questions and JUSTIFY each answer . Either post to GC or save in your science binder.

1a. If Jessica has light eyes (bb) and both of her parents have dark eyes (Bb) which statement is true.

- a. Jessica inherited both genes from her father.
- b. Jessica inherited both genes from her mother.
- c. Jessica inherited one recessive form of the gene from each parent.
- d. Jessica inherited one dominant form of the gene from each parent.

#### 1b. Justify your answer:

2a. Steven went to a farm and picked a bright red tomato from a broken branch on the plant. The tomato had a rotten spot with a worm inside. Instead of eating the tomato, Steven decided to plant the seeds and grow new tomato plants.

Which characteristic of the tomato plant is inherited and could change over several generations?

- a. Color of the skin
- b. Size of the rotten spots
- c. Length of worms inside
- d. Number of broken branches.

#### 2b. Justify your answer:

# **WEDNESDAY - Question analysis**

Cross two parents with the following genotypes to find out the possible offspring in order to answer the following questions.

#### Parent 1 - **Dd**

#### Parent 2 - Dd

- 1. What percent chance could offspring have to *show* the recessive genotype in the phenotype?
- 2. What percent chance could the offspring have a heterozygous genotype?
- 3. Justify both of your answers.

## THURSDAY - Model Building -

**(Option 1)** *Family Genetic Tree.* Using your knowledge, and that of your parents, create a family tree identifying 2 specific traits that have been passed down through generations on both sides of your parents. For example: follow eye color and height. Start with you and your siblings and then move backwards in time. Be creative. Call grandparents / aunts / uncles/ cousins, etc. if you're able to contact them. Try to determine the genotypes of the family members for those specific genetic traits.

## (Option 2)

<u>Double Punnett square (2 factor cross) -</u> **Research** how to create a punnett square crossing for 2 traits. <a href="https://hobart.k12.in.us/jkousen/Biology/2factor.html">https://hobart.k12.in.us/jkousen/Biology/2factor.html</a> (might help!)

Cross the following: a tall person (TT) with blonde hair (bb) crosses with a short person (tt) with brown hair (BB).

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