

Ms. Jamila Omar

Newsletter Grades (5-8)

Math and Science April 30, 2020

5th Grade Math:

Students will work on decimals. Work on moving decimals to the 10th and the 100th. Students work on worksheets for decimals and how to add and subtract, multiply, divide decimals.

6th Grade Math:

Continue working on (MAD) Mean absolute deviation. Figure out the mean, then apply the mean to the numbers presented and subtract, then divide by the amount of numbers. To find the **mean absolute deviation** of the data, start by **finding the mean** of the data set. Find the sum of the data values, and divide the sum by the number of data values. Find the **absolute** value of the difference between each data value and the **mean**: $|\text{data value} - \text{mean}|$. **Mean absolute deviation** (MAD) of a data set is the average distance between each data value and the **mean**. **Mean absolute deviation** is a way to describe variation in a data set. **Mean absolute deviation** helps us get a sense of how "spread out" the values in a data set are.

7th Grade Math:

Continue working on (MAD) Mean absolute deviation. Figure out the mean, then apply the mean to the numbers presented and subtract, then divide by the amount of numbers. To find the **mean absolute deviation** of the data, start by **finding the mean** of the data set. Find the sum of the data values, and divide the sum by the number of data values. Find the **absolute** value of the difference between each data value and the **mean**: $|\text{data value} - \text{mean}|$. **Mean absolute deviation** (MAD) of a data set is the average distance between each data value and the **mean**. **Mean absolute deviation** is a way to describe variation in a data set. **Mean absolute deviation** helps us get a sense of how "spread out" the values in a data set are.

8th Grade Math:

Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b . Observe using graphs and tables that a quantity increasing exponentially

eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. Construct and compare linear and exponential models and solve problems

- Interpret expressions for functions in terms of the situation they model

Introduce the quadratic equation and solve examples:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Where the + and – mean there are two answers when solving examples:

$$x = \frac{-b + \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-b - \sqrt{b^2 - 4ac}}{2a}$$

Enter the coefficients for the $Ax^2 + Bx + C = 0$ equation and Quadratic Equation will output the

5th and 6th Grade:

How do people affect the environment? What is pollution and how does that affect the environment around us. What are some common activities that pollute air and water? What might cause an increase in the number of people who have asthma? How might cutting down all the trees in an area affect the environment?



Science:

7th & 8th Grade Science:

Communication most often happens between members of a species, though it can also take place between different species. For instance, your dog may bark at you to ask for a treat! Some species are very social, living in groups and interacting all the time; communication is essential for keeping these groups cohesive and organized. However, even animals that are relative loners usually have to communicate at least a little, if only to find a mate.

What forms can communication behaviors take? Well, animal sensory systems vary quite a great deal. For instance, a dog's sense of smell is 40 times more acute than ours! Because of this sensory diversity, different animals communicate using a wide range of stimuli, known collectively as *signals*.

Below are some common types of signals:

- Pheromones—chemicals
- Auditory cues—sounds
- Visual cues



- Tactile cues—touch

Visual signals

Visual communication involves signals that can be seen. Examples of these signals include gestures, facial expressions, body postures, and coloration.

Gesture and posture are widely used visual signals. For instance, chimpanzees communicate a threat by raising their arms, slapping the ground, or staring directly at another chimpanzee. Gestures and postures are commonly used in mating rituals and may place other signals—such as bright coloring—on display.

Facial expressions are also used to convey information in some species. For instance, what is known as the fear grin—shown on the face of the young chimpanzee below—signals submission. This expression is used by young chimpanzees when approaching a dominant male in their troop to indicate they accept the male's dominance.

