June 2015 – Sixth Grade Summer Math Calendar

1 Gather 5 boxes of food. Find the volume of each box. Find the surface area of each box. (Hint: surface area = the sum of the areas of each face)	**2** Create a problem and then have family members and/or friends solve it.	**3** The Grand Canyon is about 277 miles long, 18 miles wide, and about 4,000 feet deep. What is its area in square feet?	**4** If you were to fill the Grand Canyon with water, how much water would you need? (Hint: V= L x W x H; use depth for height.)	**5** A new snack will be sold in either a box that is 8 inches tall, 6 inches wide and 2 inches deep, or one that is 5 inches tall, 5 inches wide, and 4 inches deep. Which box will hold more cereal when full?
8 Last year on November 23rd, 2,200 visitors came to the Columbus Zoo. If each visitor paid an entry fee of $5.50, how much money was collected in entry fees for that day? If each visitor added 50 cents to their entry fee towards upkeep of the zoo, how much money was collected?	**9** Now that you have your equipment, you need to start getting into shape. On Monday you walk 2 and 1/2miles, on Wednesday you walk 3.25 miles and on Friday you walk 1 and 3/4 miles. How far did you walk this week? (Give your answer as both a decimal and fraction.)	**10** The Appalachian Trail is 2,172 miles long. About how many miles would you have to hike each day in order to walk the entire trail in 20 days?	**11** How many miles will you have hiked when you have completed one-half of the Trail? How many miles will you have hiked when you completed three-fourths of the trail?	**12** You've finally made it to Georgia and the southern end of the Appalachian Trail! The temperature on this day is 35 degrees Celsius. Would you be warm, cold, or comfortable? [If you don't know you can change this to Fahrenheit using this formula: F= 9/5 x C + 32)]
15 Three different types of aircraft that can be seen at the National Air and Space Museum include the Mercury Friendship 7, a space capsule that weighs 2,900 pounds; the Spirit of St. Louis, an aircraft that was used in the first solo flight across the Atlantic and weighs 2,150 pounds, and the Peashooter, the first metal fighter plane that weighs 2,196 lbs. Put the weight of these three aircrafts in order from greatest to least. Find their mean weight.	**16** What is the range of the weights of these 3 aircrafts? (Hint: the difference between the largest and smallest numbers) If another aircraft at the Museum that weighed 3,165 pounds was included in the list of weights, how would this change the mean weight? How would it change the range? Find both the mean and the range of the four weights to prove or disprove your answers.	**17** Also at the National Air and Space Museum are reproductions of the Viking Lander, which landed on Mars in 1976, and the Pioneer 10 that reached the outer limits of the solar system in 2003. How many years passed between these two events? How much of a century passed between these two events? Express your answer as a fraction and a decimal.	**18** As you prepare for your hike on the Appalachian Trail, you'll need to buy 1 pair of hiking boots for $39.99; a sleeping bag for $52.49, a canteen for $13.99 and a sturdy backpack for $89.99. How much will your equipment cost altogether? (Don't forget the 6% tax. The amount of tax for each item = the price times .06. Round to the nearest cent.)	**19** Weigh yourself. What fraction of a ton do you weight? Convert your weight from pounds to ounces. (1 pound = 16 ounces). If you combine your weight with the weight of the heaviest of the 3 aircrafts from Monday (the Mercury Friendship 7, the Spirit of St. Louis, and the Peashooter) how many tons is that?
22 At the Columbus Zoo, there is a gorilla exhibit that is 200 feet long and 134 feet wide. There are 12 gorillas roaming freely in this area. Approximately, how many square feet are available for each gorilla?	**23** The Columbus Zoo is home to 6,532 animals. Round this number to the nearest thousand, hundred, and ten. Which estimate is closest to the actual number of animals and why?	**24** Three consecutive even numbers add up to a number between 100 and 120. What might the numbers be?	**25** On November 23rd, there were 2,200 visitors. On November 24th, there were 3,000 visitors. On November 25th, the Zoo had 2,900 visitors and on November 26th, there were 3,015 visitors. Make a line graph showing this set of data.	**26** Convert the weights of the Mercury Friendship 7, the Spirit of St. Louis, and the Peashooter from pounds to tons. Express your answers in both fraction and decimal form. (2,000 lbs. = 1 ton)