



Grade 6 Mathematics Summer Fun

*****Choose and complete 3 assignments each week. *****

Week 1 – July 12th – 18th

*Track the weather each day including temperature highs and lows, humidity, and type of weather. After you have recorded a week of weather, create charts/ graphs to show your findings. *This will need to be done at the beginning of the week to get enough data

Use a deck of cards to have a “subtraction war.” Flip three cards to create a 3-digit number for you and a partner. Player one flips two cards to make a two-digit number. Subtract this number and continue play. Whoever gets to zero first is the winner.

Create word problems for someone else in your house to solve. Try to use real life examples when writing the problems (i.e. Mom went to the store and needed 5 oranges. Each orange cost 89 cents. If she gave the clerk 4 dollars, would she get change back? Explain). Write 5 problems using different math skills for each.

Using the nutrition information on the back of the ice cream container, find out how many calories, sugar, and fat are in one serving. Next, find 5 of your favorite foods. Use the nutrition information to compare these items and find out which is the healthiest. Make a chart showing the data from the different foods. For items like fruits/ veggies, use the internet to find out nutrition information.

Use the following link to play an online ice cream shop game. Change improper fractions to mixed numbers to make the correct customer orders.

<https://mrnuessbaum.com/clara-fraction-s-ice-cream-shop-online-game>

Make sure to read the directions or watch the tutorial before playing so you know what to do.

Use the following link to view a line graph showing ice cream flavor sales then answer the questions below it using information from the graph

<https://mrnuessbaum.com/ice-cream-flavors-line-graph>



Week 2 – July 19th – 25th

Use two buckets or containers to label one prime, the other composite. Next, take beanbags, balls, etc.(anything that can be thrown) and label them with different numbers. Have your child toss the item into the basket that corresponds with the number on it. For example, a 7 would be tossed into the “prime” bucket.

Play the math game “strike it Out” by drawing a number line with numbers 0-100. Player 1 crosses out 2 numbers and then circles the sum or difference of the numbers. Example: cross out 2 and 4 (2+4) and circle 6. Player 2 must then use the circled number (6) to start their turn. The goal is to continue crossing out numbers until a player cannot make any more equations. The last player to make an equation win.

Materials: paper, ruler, markers, divider (folder, box, etc.)

Begin by making 2 number lines from 0-1 (increments for decimals .1, .2, .3, etc.) and have player 2 do the same. Both players begin with the two number lines in front of them and a divider between them so their number lines are hidden. This game is similar to battleship. Each player will place a decimal on their number line. The other player will try to guess what the decimal is. Use the second line to mark your guesses and use questions like is it smaller than... or is it larger than. The winner is the first to correctly guess the decimal.

Materials: a deck of cards (ace=1, jack 11, queen 12, king 13)

In this game, students will be looking to get the highest product in each round. To play shuffle and deal half the deck to each player. Each player will flip over two cards and then multiply the values of the cards together. Whoever has the highest product collects all four cards. Play continues until a player runs out of cards. The winner has the most cards at the end of the game.

Use the following link to access a list of ocean temperature data. In this activity, you will be creating

a graph to show how the ocean temperature has changed

- Use the column titled “actual temp” as well as the year
- The actual temp is listed in Celsius. If you'd like, you can change this to Fahrenheit to make the numbers easier to understand using google
- Make sure your graph is detailed enough to show the small changes in the average temp. And is properly labeled

https://www.jpl.nasa.gov/edu/pdfs/global_annual_mean_temp_anomalies_land-ocean_1880-2016.txt

What does the data tell us? Why is this significant? Read the following article to find out

<https://www.nationalgeographic.com/environment/oceans/critical-issues-sea-temperature-rise/>

Read the article about tracking whales in NYC then complete the activities for reading and creating line plots below the article.

<https://dynamath.scholastic.com/issues/2016-17/030117/whales-in-the-city.html#900L>



Week 3 – July 26th – 31st

Make a list of gear that you would need/ want to go on a camping trip for 2 days (at a minimum food, shelter, and water supplies). Use the following sites to pick items that you would bring and add prices to your list.

<https://www.target.com/c/camping-outdoors-sports/-/N-5xt6e>

How much would a camping trip cost if you had to buy all these items? Are there any items you can eliminate to save money?

Materials: egg carton, scissors, coloring items, counters (beans, beads, marbles,)

To make your own mancala game, cut the lid of an egg carton and then cut each end (2-3 inches) off the lid. Nest the lid under the bottom to create the end bucket of the mancala game. Have each player decorate the game board. To begin play, place four counters in each section of the egg carton. The goal of the game is to “gather” as many pieces as possible in your end bucket. The goals and variations of mancala can be found here:

<https://www.parentingscience.com/mancala-games.html>

Materials: ruler or tape measure, a sunny day, paper/pencil

Measure the length of your shadow at three different times of the day. Set an alarm to help you remember to measure. Record each length. How did the time of day impact the length of the shadow? Why do you think this is?

Create your own Olympics themed math board game. Use 2+ operations when creating the game. You can also make it for a younger sibling/ family member and then help them play it. Check out this site for board games created by other students to help get ideas

<https://blog.mindresearch.org/blog/game-a-thon-top-teams-2019>

Use geometry to create your own frisbee. Start with 2 sheets of plain paper and scissors. Follow the directions in the link below to make a frisbee then have a competition to see who in your family can throw it the furthest.

<http://almostunschoolers.blogspot.com/2012/05/paper-frisbee-geometry.html>

Use the following chart to create a graph showing the medal counts for all past Olympics for the leading countries. Make sure you label your graph accurately and use equal increments on each axis. Select the image and expand/ open in a different document to see the numbers.