**Ways to support your child:**
- Make a plan and help your child identify the areas of mathematics s/he would like to focus on over the summer.
- Recognize your child’s strengths and always be encouraging to your young mathematician.
- Have fun solving problems together and creating your own new math challenges.

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**July 2020**

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<th>Sun</th>
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<tr>
<td><strong>Directions:</strong> The purpose for the activities is to have fun with math and see math throughout your day. Encourage a “growth mindset” letting your child know that they have unlimited math potential and that it’s all about working hard. The calendar does not need to be returned in the fall, but we hope you complete many of the activities and use them to develop and explore your own ideas!</td>
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**Math Tools You May Need:** Blank paper or a spiral notebook for problem solving and creating, ruler (https://printable-ruler.net/), pencils, colored pencils, scissors, internet access |

- **1** Make a calendar or chart to keep track of how many minutes you read each day this month. Estimate the number of minutes you think you will read.
- **2** Sort the laundry by owner, size, color, or item type. Which family member had the most socks?
- **3** Measure your height in inches. Measure the height of a parent or guardian. Write and solve an equation to determine how much taller your parent is than you.
- **4** Play a board game or put together a puzzle.
- **5** Buy a small bag of M & Ms (or raisins, crackers, etc.). Pour them into a jar or bowl. Estimate how many are in the jar. Count the items to see how close your estimate was.
- **6** Find a chart or graph in the newspaper. Find the range of numbers for the information that was graphed.
- **7** Determine your age in months. Figure out how many days old you are. Don’t forget leap years!
- **8** Make five triangles using eleven toothpicks.
- **9** Survey 15 people to find their favorite outdoor activity. Graph the results.
- **10** List at least 24 different combinations of coins that equal $1.00.
- **11** Use a magazine to find three pictures that have at least one line of symmetry.

- **12** Do jumping jacks for one minute keeping track of how many you completed. Do the same for sit-ups. Divide the number of jumping jacks by the number of sit-ups.
- **13** Draw a hexagon, a pentagon and an octagon. How many lines of symmetry can you find in each?
- **14** What number am I? I am > 3,449 and I am < 3,502. I have a 1 in my ones place and a 0 in my tens place. After determining the number, create your own number.
- **15** Make a chart to keep track of the number of dogs you see each day for one week. Make a bar graph by days of the week of the number of dogs you see each day.
- **16** A pattern shows that a number doubles each day (for example, 1, 2, 4, 8, ...). How large will the number be on the 18th day?
- **17** Tony swam 3 laps each day and Mike swam 4 times as many laps as Tony each day. How many laps did Mike swim in 7 days?
- **18** Go outside and make a list of all the shapes you see. Categorize them by 2-D and 3-D shapes.
- **19** Drop water onto different size coins. Count the number of drops you can put on each coin before water begins to spill off. Graph your results using a bar graph.
- **20** Empty out a small bag of different colored candy. Express the amount of each color of candy as a fraction.
- **21** \[ 18 \div 3 = 6 \]
- **22** Over the next five days record the high temperature. Make a bar graph to represent this data.
- **23** Make five quadrilaterals with toothpicks. Prove they are quadrilaterals to another person.
- **24** Play a board game or put together a puzzle.
- **25** Find three examples either indoors or outdoors that show perimeter and area. Share with an adult and explain why each shows perimeter or area.
- **26** Sarah runs twice as fast as her friend Mia. If Mia runs 3 mph, how long will it take Sarah to run 6 miles? 9 miles?
- **27** \[ 20 \div 4 = 5 \]
- **28** True or False? \[ 7 \times 5 = 5 \times 5 + 2 \times 5 \]
- **29** Using a deck of cards, draw two and multiply the numbers. \( \{11, 10, K = 0 \text{ and Ace} = 1 \} \)
- **30** Play a board game or put together a puzzle.
- **31** Add up the number of minutes you read this month. How close to your estimate was your actual number of minutes read?

**Sun:**
- **5** Buy a small bag of M & Ms (or raisins, crackers, etc.). Pour them into a jar or bowl. Estimate how many are in the jar. Count the items to see how close your estimate was.

**Mon:**
- **6** Find a chart or graph in the newspaper. Find the range of numbers for the information that was graphed.

**Tue:**
- **7** Determine your age in months. Figure out how many days old you are. Don’t forget leap years!

**Wed:**
- **8** Make five triangles using eleven toothpicks.

**Thu:**
- **9** Survey 15 people to find their favorite outdoor activity. Graph the results.

**Fri:**
- **10** List at least 24 different combinations of coins that equal $1.00.

**Sat:**
- **11** Use a magazine to find three pictures that have at least one line of symmetry.
### Problems

**2** Flip a coin 25 times. Write a fraction to show how many times it came up heads and another fraction to show how many times it came up tails.

**3** 4 x 6 = 24
   4 x 7 = 28
   4 x 8 = 32
   4 x 9 = 36
   What clues help you? Skip count by 4s forward and backward to/from 100.

**4** If you get up at 7:30 a.m. and need to be at your friend’s house by 8:15 a.m., how much time do you have to get ready if it takes you twelve minutes to walk there?

**5** Use the numbers 4, 5, 3 and 2 and any operations (+, -, x, and ÷) to create at least 10 problems that each has a different answer.

**6** Beat the Clock! List 5 things you could do in 1 minute or less. Try each one. Were you successful?

**7** Roll 2 dice together and multiply to find the product. Do this 15 times. Create a bar graph with the results. What did you notice?

**8** Play a board game with a friend or family member or put together a puzzle.

**9** 54 ÷ 6 = 9
   48 ÷ 6 = 8
   42 ÷ 6 = 7
   36 ÷ 6 = 6
   What clues help you in solving these problems? Skip count by 6s forward and backward to/from 100.

**10** 6 x 6 = 36
     6 x 7 = 42
     6 x 8 = 48
     6 x 9 = 54
     What clues help you? Skip count by 6s forward and backward to/from 100.

**11** How can 13 children be arranged on a park ride that seats 2? 3? 4? 5? How many kids are left waiting?

**12** If there are two towns with eight schools each and 11 doors in each school, how many doors in all?

**13** Find the area of your bedroom. What room in your house could have twice the area of your bedroom? Half the area of your bedroom?

**14** Maria’s garden is in the shape of a square with a perimeter of 32 feet. What is the area of her garden?

**15** Listen carefully and tell me which numbers I am missing: 7, 14, 21, 35, 42, 56. Create your own trick pattern.

**16** Go on a 3-D scavenger hunt. How many cylinders, pyramids, cubes, rectangular prisms and cones can you find today? Create a table with your data.

**17** 7 x 6 = 42
     7 x 7 = 49
     7 x 8 = 56
     7 x 9 = 63
     What clues help you? Skip count by 7s forward and backward to/from 100.

**18** Draw a design using 3 different shapes. See if a partner can make the same design just by listening to your directions.

**19** Looking at a calendar, ask someone to choose 4 days that form a square. They should tell you only the sum of the 4 dates and you determine what the dates are.

**20** Find two objects in your house for which the length of one is double the length of the other. Measure the length in centimeters or inches.

**21** Measure the distance you can jump from a standing position. Record the distance of 5 jumps. What is your combined total?

**22** Show 4 different ways to make $1.56 using coins and/or bills.

**23** Ben has six square tiles. Each tile has a width of 8 inches. He lays the tiles down in a long row. What is the perimeter of the row of tiles?

**24** 8 x 6 = 48
     8 x 7 = 56
     8 x 8 = 64
     8 x 9 = 72
     What clues help you? Skip count by 8s forward and backward to/from 100.

**25** Sally sent a package with one 60-cent stamp, four 32-cent stamps, three 25-cent stamps and four 1-cent stamps. What was the total postage on the package?

**26** Play a board game with a friend or family member or put together a puzzle.

**27** Read a book of your choice. What math ideas did you find?

**28** At a playground, time 5 friends running across the field. Make a line graph of their finishing times.

**29** A cantaloupe weighs 56 ounces. There are 16 ounces in a pound. How many pounds does the cantaloupe weigh?

**30** 9 x 4 = 36
     9 x 5 = 45
     9 x 6 = 54
     9 x 7 = 63
     What clues help you? Skip count by 9s forward and backward to/from 100.

**31** Add up the number of minutes you read this month. How close to your estimate was your actual number of minutes read?

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**Websites to Explore:**
- [Bedtime Math](http://bedtimemath.org/)
- [Talking Math With Your Kids](https://talkingmathwithkids.com/)
- [Illuminations](http://illuminations.nctm.org/Search.aspx?view=search&kw=activities)
- [Math Dictionary for Kids](http://www.amathsdictionaryforkids.com)
- [Set Game](http://www.setgame.com/)
- [Which One Doesn’t Belong?](http://wodb.ca/)
- [Fraction Talks](http://www.fractiontalks.com/)

**August 2020**