



# Family Math Newsletter

## Junior Edition

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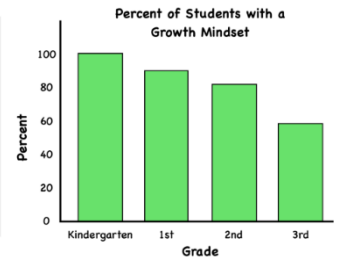
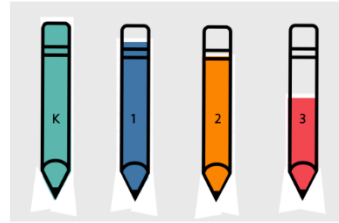
### Game: I Spy



**Materials:** A deck of cards (face cards removed). Ace =1  
**How to Play:** Shuffle the cards and place them face up in 4 rows of 5. Player 1 challenges the other player to find two cards that add to a particular number. The cards must lie next to each other, either vertically or horizontally. e.g., “I spy two cards that add to 14”

Player 2 finds as many pairs as possible of cards that have that sum and adds them to their pile. Once Player 2 cannot find any more pairs, their turn is over. Now switch roles! (You may move cards together when large gaps appear). The player with the most cards wins! For an extension, this game could also be played using multiplication.

### Math Talk: Data Literacy Focus



What do you notice? What do you wonder? What information and data does this visualization share? The crayons and the bar graph both represent the same data. Which one do you think is more effective to display the data? What factors, other than age, could affect a growth mindset? What happens when you change your own mindsets?

### Taking Learning Outdoors: Natural Equations

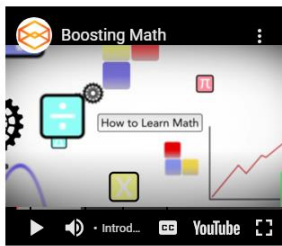
#### Key

- A leaf = 1
- A stick = 5
- A stone = 7
- A seed = 10
- A nut = 12



Use natural materials to represent numbers for algebra equations. Find 5 different natural materials and assign them each a number of 1, 5, 7, 10 or 12. Can you use your natural materials to create an equation that has a sum of: **6 8 2 13 14**

### Good Watch: Boosting Math



All children can achieve a high level of mathematical success and teaching with this in mind will dramatically improve achievement. Click the image to watch the video, “How to Learn Math: 4 Key Messages” by Professor Jo Boaler.

### Problem Solving Tasks and Experiences

You earn \$4 for every 3 raffle tickets you sell. If you sold 30 tickets, how much money would you earn?



How could you use this ratio table to help you solve the problem?

|              |   |   |   |    |  |  |  |
|--------------|---|---|---|----|--|--|--|
| Tickets Sold | 3 | 6 | 9 | 15 |  |  |  |
| Money Earned | 4 | 8 | ? | ?  |  |  |  |

### Puzzle or Riddle

 ×  = 121  
 12 ×  = 132  
 = 20 -   
 -  = 7  
 ×  = ?

Working on logic puzzles with your children is a fun and engaging way to get them to think mathematically, collaborate to solve problems, and to generate rich math conversations. Can your family solve this puzzle? Check out [Mash Up Math](#) for more puzzles.