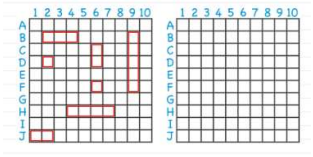
Family Math Newsletter
Junior Edition

Issue 2 • January 2024

Game: Battleship Paper Edition

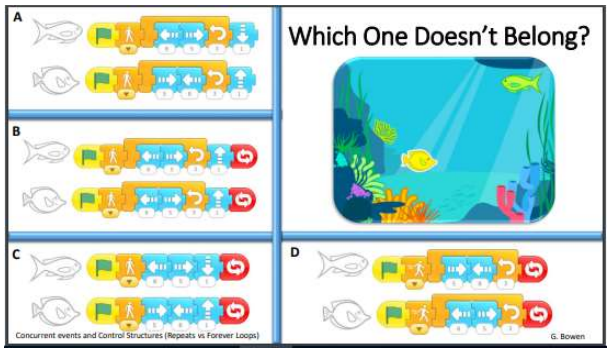


Each player's fleet consists of the following ships:

- 1 x Aircraft carrier - 5 squares
- 1 x Battleship - 4 squares
- 1 x Cruiser - 3 squares
- 2 x Destroyers - 2 squares each
- 2 x Submarines - 1 square each

Players try to guess the location of their opponent's ships on a grid.
Each player draws two 10x10 grids, labelled along the sides with letters and numbers. On the left-hand grid, secretly draw rectangles to represent your fleet of ships.
Take turns making a guess at your opponent's location by calling out the coordinates of a square (e.g., D5). The opponent either responds with a "yes" or a "no." During play, each player records their opponent's guesses on the left-hand grid and their guesses on the right-hand grid using **X** for a hit and **O** for a miss. The first player to guess all of their opponent's hidden ships wins.

Math Talk: Coding



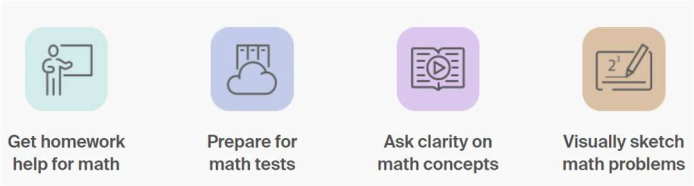
What do you notice? What do you wonder?
What makes the images alike? Different?
Which one doesn't belong? Explain why.
Which 2 may belong together?
Describe what is happening in this code.

Taking Learning Outdoors: Coded Treasure Hunt

Head outside and hide an object in your outdoor space. Use clear and explicit directions to "code" each other to find the hidden object (alternatively, write down the steps to find the hidden object – a treasure map algorithm). *Example: Head right 10 steps. Then turn ¼ turn to the left. Walk 8 steps. Next rotate 90° clockwise. Walk 5 steps. Look down and find the object.* Try using other directional language, like rotate clockwise 90°, rotate counterclockwise 90°, east, west, north or south.

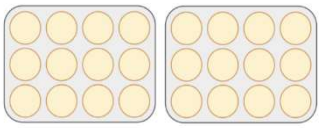
Good Read

TVO Mathify provides FREE online math help for Ontario students in Grades 4-12. You can access 1 to 1 math tutoring from any digital device, between the hours of 9am and 9pm, whenever you need help.



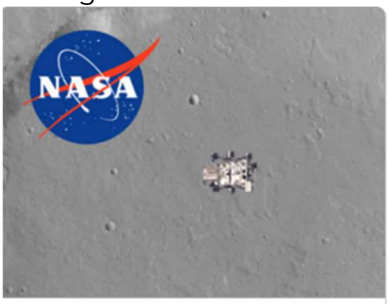
Problem Solving Tasks and Experiences

Felix baked two dozen muffins to deliver to his friends. He plans to share one-third of the muffins with the Hill family and one-quarter with the Schmidt family. Which group will get more muffins? How do you know? How many muffins will be left over for his own family? *Extension: How would these deliveries and leftovers change if Felix had only baked one dozen muffins? Or six dozen?*



Coding

Looking for educational activities online? Hour of Code has many self-paced tutorials for students to work through and explore coding.



NASA: Explore Mars With Scratch