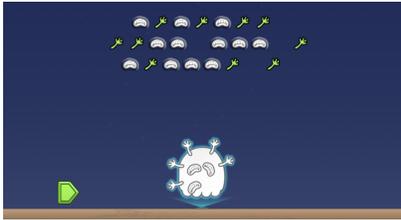


Materials

Unifix Cubes, Paper and Pencil

Directions

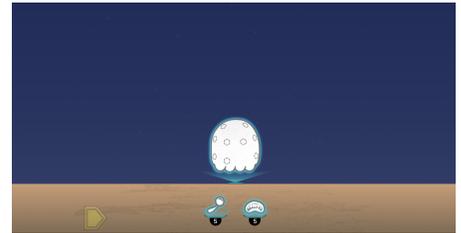
- Play any puzzle from Level 1 of the Ratio Monster Game to introduce students to the game. Have an informal discussion about what they notice happening in the puzzle.



- Give out materials. Project any puzzle from Level 3. Have the students work to solve the puzzle using the cubes or paper and pencil. Allow opportunities for students to share different strategies.



- Project any puzzle from Level 4. Compare what is being asked. Compare the strategies used to solve the puzzles on the two different levels.


Sample Questions

- What is the question that we need to solve in this puzzle?
- What is the relationship between the monster and its parts, and the parts to each other?
- How did you determine those relationships? How do those help you solve the puzzle?
- How can you use that information to find the number of parts for n monsters?
- In Level 4, how does the way you build the monster affect your solution? How many different solutions are possible?

What to look for

How does the student:

- find the answer for the puzzle? (write a proportion, count, group, add, multiply, divide, etc.)
- connect their strategies to ratios and proportions? (Look for evidence in their explanation.)
- express their solutions symbolically?

Extensions

- Have the students build out tables for the puzzles. Review the tables to determine the relationships and write proportions that can be used to find n monsters.
- Show students the pieces to build ___ monsters, have them determine how many parts it takes to build 1. (Ex. Give students 15 eyes and 10 mouths. If that is what is needed to make 5 monsters, how many eyes and mouths are on one monster?) Share solution strategies.