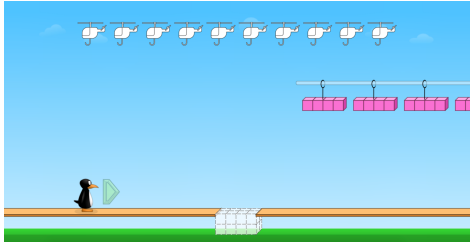


**Materials**

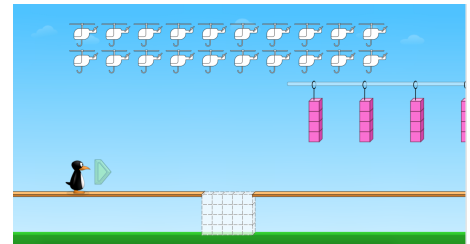
Cubes  
Whiteboards and dry erase markers



- Give students whiteboards and dry erase markers. Display the first puzzle in Level 2. Ask students, “What do you notice? What do you think you need to do to solve the puzzle?” Have students Think, Pair, Share (TPS) their thinking and strategies.
- Try a student’s solution and watch the animation together. Say to students, “What is happening in this puzzle? How did you know how many cubes we needed to fill the figure so JiJi could cross?”
- Define volume as the number of unit cubes needed to fill a solid figure without any gaps or overlap. Discuss different strategies students used to count the cubes to find the volume of the shape. Solve a few more puzzles in Level 2.

**Directions**

- Display the first puzzle in Level 4. Work together to count the total number of cubes.
- Solve the remaining puzzles in Level 4. For each puzzle, ask students to record their answer and then share their strategy for counting cubes with a neighbor.


**Sample Questions**

- How did you determine how many helicopters to select? Have students share different strategies.
- Could the loads drop straight into the prisms in the ground without reordering? Justify your reasoning.
- Can you think of real world examples when we need to know the volume of a solid figure?

**What to look for**

How do students:

- determine how many loads to select? (counted how many cubes were in the load and how many were in the prism in the ground, then divided; counted how many 2 by 2 stacks would fit into the prisms)
- could think about how the red cubes be stacked? (They could be stacked 1 by 4.)