

Create Riddles for Multiplication and Division

Use “Things That Come in Groups” chart as a data base for riddles.

Students select or create a multiplication situation.

Students record 3 pieces of information to describe the multiplication situation.

Students illustrate the multiplication situation.

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Multiplication Situations

- Jim found 3 ants
Each ant has 6 legs
There are 18 legs in all
- Identify 3 pieces of information in the sentences about the ants
- Students write riddles by leaving out one piece of information for each riddle



Back of Picture: Riddles

There are 4 sun designs. Each design has 8 triangles How many triangles are there altogether?	
	There are 32 triangles altogether? There are 4 sun designs? How many triangles are in each design?
Each design has 8 triangles. There are 32 triangles in all. How many sun designs are there?	

What understandings about multiplication and division are students developing with this task?

- This task uses context created by the students as they begin to think informally about the structure of multiplicative situations.
- Writing the questions, leads students to focus on the information used to describe multiplicative situations.
- This task allows students to determine a multiplicative situation based on their ideas and experiences.
- Students determine their own numbers and are able to use solution strategies that make sense to them.
- Student illustrations provide visual images for multiplicative situations.
- This task provides opportunity for curriculum integration
- This task provides the teacher with a window into the range of understanding of students around the ideas of multiplication and division. The situations students describe, the numbers students use, their solution strategies and their sense making of these tasks provide formative assessment. (“knowledge of where the students are within the mathematics”)
- Students will need to revisit this task several times in order to make sense of the structure of the problems created by the riddles. This task provides an opportunity for students to begin to informally develop relationships between multiplication and division.