



## More About Math

### Lost and Found

#### Background for Leaders

This unit focuses on spatial reasoning skills for 6-8 year olds. Through these activities children build their spatial sense by describing the position, location, and direction of an object; giving and following directions for moving through space; working with maps to find locations; visualizing how objects go together; and making judgments about how to rotate and flip objects so that they fit together.

#### Spacial Sense

**Spatial sense is the understanding of position, direction, and location in space.** The goal of teaching spatial reasoning skills is to reinforce vocabulary related to position, location, and direction, to work with maps so children can read maps to find locations, and to visualize how objects go together as well as what transformations are needed to make this happen.

Children at this age may need assistance communicating the relative position of an object. Related vocabulary terms that children may use to describe where an object is in relation to another object are: **next to, above, below, behind, right and left.** Once children are comfortable with these terms and use them correctly they may be strung together to give two directions. For example in **Pantry Hunt**, Corporal Cup asks children to find objects, “**above and to the left of the can of carrots**”.



Spatial sense includes the ability to read a map and give and/or follow directions using a map to get to a specific location. When reading a map, children will utilize landmarks as guides. Some of these landmarks may serve as obstacles which they need to avoid while other landmarks may be their goal location. Once children have experience reading maps challenge them to find the shortest route to a location.

Many of the mapping activities incorporate a coordinate grid; a coordinate grid enables children to use labeled columns and rows to identify the location of landmarks. For example, in **Aardvark Town**, children must identify A-2 on the map. This means they have to find where row A and column 2 meet on the map. To help children learn this skill have them trace the columns and rows with their fingers to find where they meet.

Children at this age should have some experience putting together puzzles. Putting puzzles together requires spatial visualization and transformations. Spatial visualization is the practice of knowing how objects fit together. This skill may require trial and error to find the pieces that fit together and children should be encouraged to keep trying. Suggest for children to recognize similarities and differences in the pieces indicating where they belong. For example, are there certain colors or lines in the piece that matches up with another piece?

As children work to put together puzzles and objects they may need to use transformations, which are slides, flips, and turns. Most often children may need to rotate, or turn, a piece to get it in the proper orientation or slide it to get it in the proper location. Encourage children to persevere and try various pieces and orientations to put objects and puzzles together.

