

FIND A SHAPE

Description

This learning experience combines gross motor (or fine motor) activity with mathematics. Children dash to step on a form that matches the shape name called by the teacher, then describe the attributes of their shape that make it a good example of a square or rectangle or triangle and so on. The alternate version of this activity involves a tabletop game (see lesson extension #6 below).

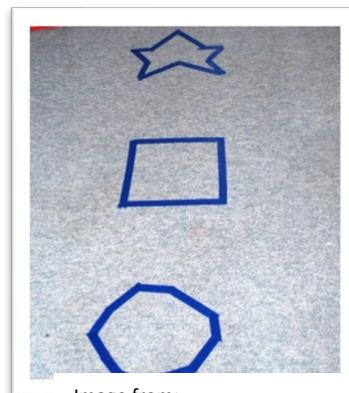


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Learning Objective(s)

- Children will identify shape and describe shape attributes

Vocabulary

- shapes (*formas*)
- lines (*líneas*)
- angles (*ángulos*)
- straight (*recto*)
- point (*punta*)



Literature

For children

- *Shape Space*, by Cathryn Falwell

For teachers

- *Learning and Teaching Early Math: The Learning Trajectories Approach*, by Douglas H. Clements and Julie Sarama
- *Big Ideas of Early mathematics: What Teachers of Young Children Need to Know* by The Early Math Collaborative, Erikson Institute

Materials

- Painters' tape or chalk for drawing shapes outside
- Laminated shapes with double stick tape
- Printouts of shapes for tabletop version (optional)
- Colorful translucent chips, like bingo chips (optional)

Procedure

1. Have the words for each shape name available in children's home language, if appropriate. (E.g., *triángulo*, *cuadro*, *rectángulo*, *círculo*).
2. Use the painters' tape or chalk to make a variety of large shapes on the floor. You can also tape down laminated shapes to re-use. Be sure to create several different types

Tips for DLLs

During group learning experiences, the teacher should ask questions that are adapted to individual DLL children's level of English acquisition keeping in mind that while open-ended questions and description type questions are good for some, other more close-ended questions may be better for less verbal children. Providing language to support children's responses is a good strategy at first.

and sizes of triangles, rectangles, circles, squares, etc. Have enough shapes so that all children can step on an example of the shape you name. (Some shapes can be large enough for multiple children.)

3. Show children the shapes on the floor and tell them they must listen carefully for the shape you name. When you name a shape, they should find and stand on a shape that is the same as the one you name.
4. Name a shape. Take notice of the shapes children step on. (Are there examples that they don't step on? Non-examples that they do?)
5. Talk with selected children about the reasons why they stepped on the shapes they did. Can they justify their correct choices? What do they have to say about incorrect choices?
6. If there are correct choices that no one stepped on, ask children whether that shape is, for example, a square. Ask them to explain their response.
7. Repeat with other shapes.

Lesson Extensions

1. Add a few interesting polygons when children are ready to learn some new shapes and shape names (e.g., pentagon, hexagon).
2. If children are ready to identify shapes by attributes, ask children to step on shapes with three, four, or six sides/angles without saying the names.
3. Do a jumping version in which children jump from, for example, triangle to triangle. Be sure to place correct examples close enough together to make safe jumping possible.
4. Use sidewalk chalk for an outdoor version. Kids might create this themselves, with your guidance. (Can you draw a square? How many sides will it have? Do they need to be the same length?)
5. You can play, too. Mix up whether you step on correct or incorrect shapes, having children decide whether you are correct or not. Choose "tough" ones such as stepping on a square and asking whether it is a rectangle or stepping on a "triangle" that doesn't have a closed third angle. Ask children to explain why your choice was good or not so good.
6. **Tabletop Version**
 - a. Create a smaller, tabletop version of Find a Shape. Give each child a different colored

Tips for DLLs

Translate directions as needed to clarify game rules and words. Grouping children so that native English-speaking children and DLL children play together can help to foster relationships. Mixing language abilities in small groups makes sense all the time, but may feel particularly natural within the context of a game.

Tips for DLLs

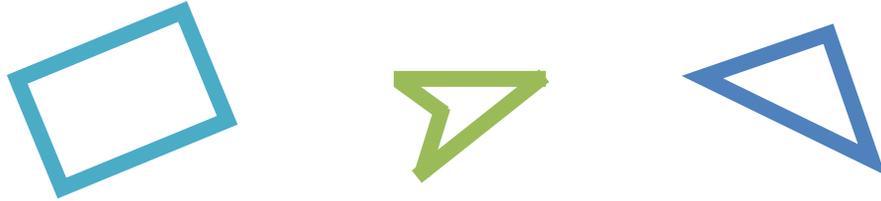
The teacher should consistently support children's understanding of instructional talk with use of relevant real-life objects, pictures and hands-on experiences. In addition the teacher may employ the following strategies: using slower simplified language, emphasizing important words, rephrasing and repeating key words, occasionally translating new words or concepts from English to the Home language (ex. "a square always has four angles"). A discussion about the different ways that rectangles can look is important. To do this it is important to give children the words along with discussions about the attributes that make a shape what it is. This can be done in English or the HL. Children will need this modeling in English if expected of them in English as well.

Tips for DLLs

Given that this module includes key vocabulary words that children are likely to know, other vocabulary to highlight could include terminology and concepts needed to play a game. These concepts could include talking aloud through strategies, or turn taking.

chip to place on the correct shape when you call out, “triangle” or “shape with four angles.” You will be able to tell from the color of the chips which children might be having difficulty. Ask children to discuss the shapes they chose and how they knew that they were correct examples.

- b. This activity could also be done with one sheet for each child.



Check ✓ for Understanding - *Show Me!*

- Do children understand the difference between a square and a rectangle? TO CHECK – Say: “How many lines does a square have? How many lines does a rectangle have? Are they the same or different?”
- Do children understand the definition of ‘angle’? TO CHECK – Say: “Does a circle have angles?”

Teacher Reflection Questions

1. The extensions above tend to provide more challenge. How would you adapt this activity (or create an alternate version) that provides more support for children who require it? *(Possible responses: use a limited number and type of shapes. For example, only use squares, circles, and a few foolers. Later, add more variety as children are ready.)*
2. Can you think of other extensions for this game that meet the same learning objectives? *(Possible responses: play the game with writing on the board, or use shapes that kids can pick up and bring to you instead of stand on)*