

Math Activities

The Heads In, Hearts In family enrichment program encourages families to use their minds (putting their “heads in”) as a tool to expand their knowledge around a variety of topic areas. By creating a shared educational experience, the family unit will work, grow and learn together, putting their “hearts in” to the process.

This unit contains the following:

- ▶ 3D Shapes
- ▶ Eggs-cellent Counting
- ▶ Guess Which Shape
- ▶ Gumball Equations
- ▶ Hungry Hedgehogs
- ▶ Marshmallow Structures
- ▶ Measure a Room
- ▶ Measurement Equivalents
- ▶ Measuring Liquids
- ▶ Photo-Graph
- ▶ Pie Die
- ▶ Skippy Clippy
- ▶ Spinner Math
- ▶ Stories Math
- ▶ Time: Before and After
- ▶ Twisting Place Values



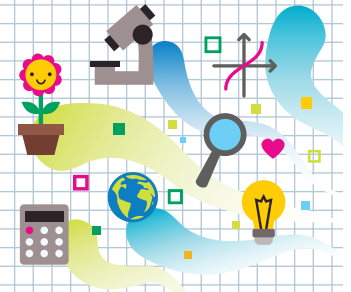
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HEADS IN, HEARTS IN

Guess Which Shape

Instructions for Set-Up



Supplies

- “Guide for Families” handout
- Clear plastic standup display (optional)
- “Mystery Shape” handout
- “Attributes Questions” handout
- “Guess Which Shape” handout
- Crayons or markers
- Display table

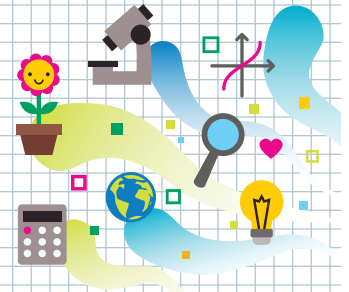
Activity Preparation

- ▶ Purchase or locate items on supply list.
- ▶ Print one copy of the “Guide for Families” handout. Laminate or place in a clear plastic standup display to allow participants to see it more readily.
- ▶ Print the “Mystery Shape” handout. Cut out the shape cards. Optionally, laminate the cards.
- ▶ Print three to four “Attributes Questions” handouts. Optionally, laminate the handouts.
- ▶ Print one “Guess Which Shape” handout for each participant or family. Optionally, print four to five copies of this handout and laminate. Then use dry-erase markers or crayons so that they can be reused.
- ▶ Set up the display table and arrange needed supplies.





HEADS IN, HEARTS IN



Guess Which Shape

Guide for Families

Learning Objectives

What you need to know:

Each shape has **attributes**, or characteristics, that describe the shape. Each shape is made up of **sides**. Some sides are straight, and some sides are curved. Some lines in a shape are **equal**, or the same length, and some lines are **unequal**, or different lengths. Some shapes also have **angles**, or corners, where two sides meet to close a shape.

What you will do and learn:

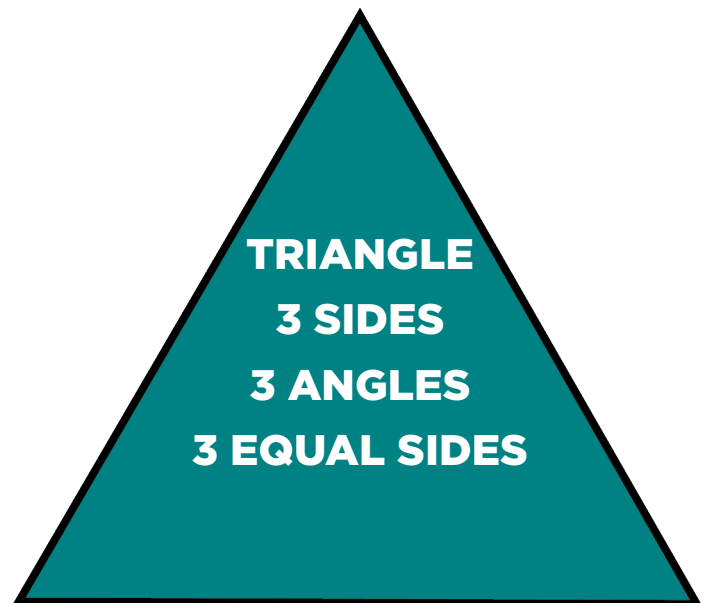
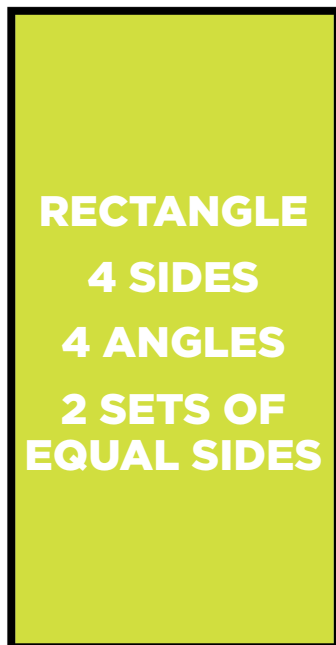
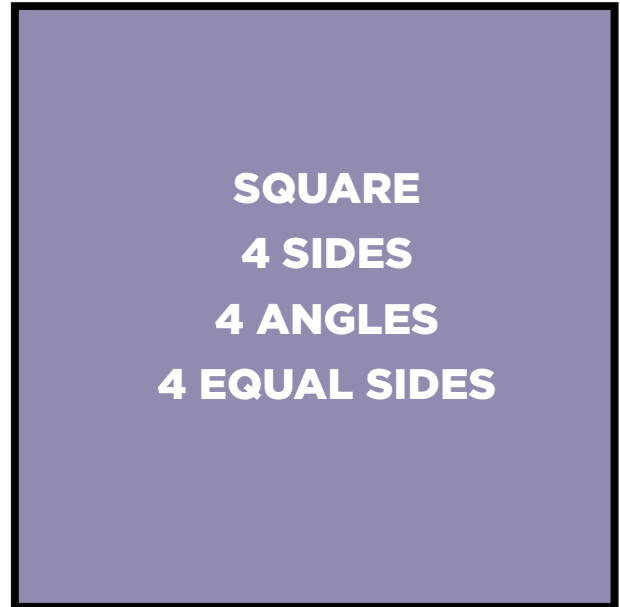
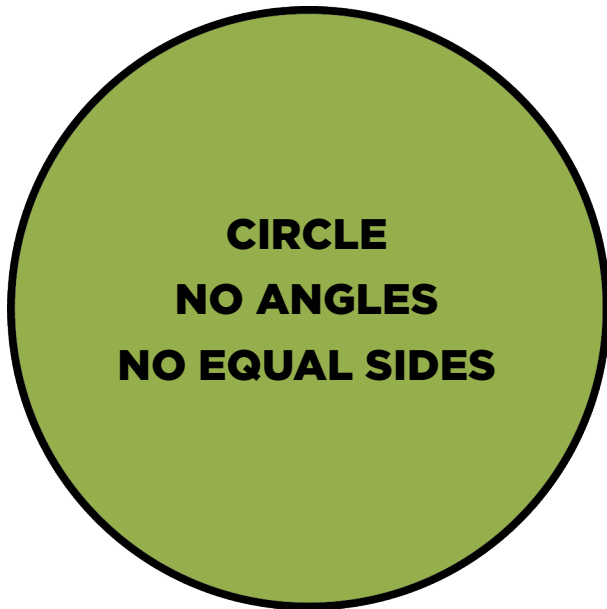
In this activity, you will try to guess a mystery shape that you can't see by asking questions about the shape's **attributes**.

Instructions

1. Ask a teacher or adult to pick a shape from the "Mystery Shape" pile and not show the shape to you.
2. Take a "Guess Which Shape" handout and a marker or crayon.
3. Using the "Attributes Questions" handout, follow the directions at the top of the handout to find information about the mystery shape.
4. When you get your answer, cross off any shapes on your "Guess Which Shape" handout that do not match that attribute.
5. Keep asking yes-or-no questions about the shape's attributes until you think you know what the mystery shape is. Then make your guess.
6. Play again and see if you can guess another mystery shape.

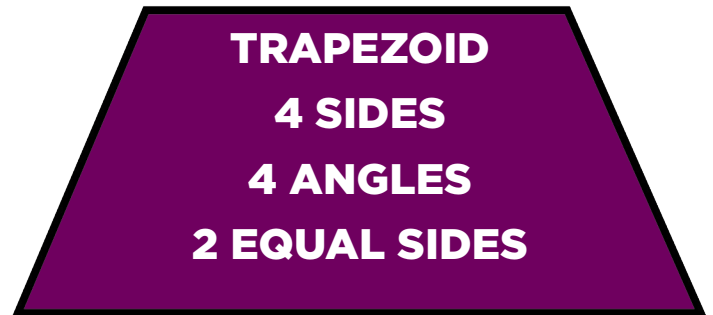
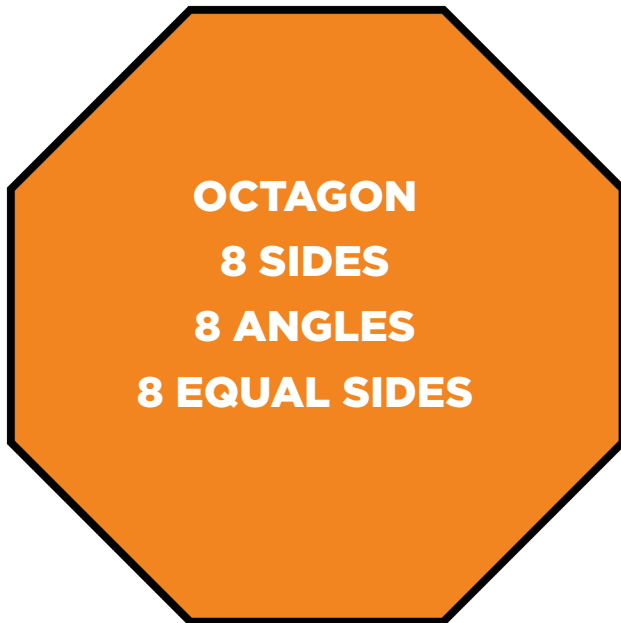
Guess Which Shape

Mystery Shape Handout



Guess Which Shape

Mystery Shape Handout, continued



Guess Which Shape

Attributes Questions Handout

Ask yes-or-no questions about the **sides** of the shape, such as “Does the shape have four sides?” Keep asking until you find the correct answers. Then ask about **angles** of the shape until you find the correct answers. Then ask about the **equal sides** of the shape until you find the correct answer. When you think you know the correct shape, take a guess.

Sides

- ▶ Does the shape have _____ sides? (Fill in a number.)
- ▶ Are the sides straight?
- ▶ Are the sides curved?

Angles

- ▶ Does the shape have _____ angles? (Fill in a number.)

Equal Sides

- ▶ Does the shape have any equal sides?
- ▶ Does the shape have all sides equal?

Guess Which Shape

Mystery Shape Handout

