

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



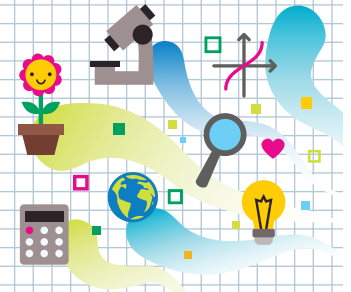
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HEADS IN, HEARTS IN

Pie Die

Instructions for Set-Up

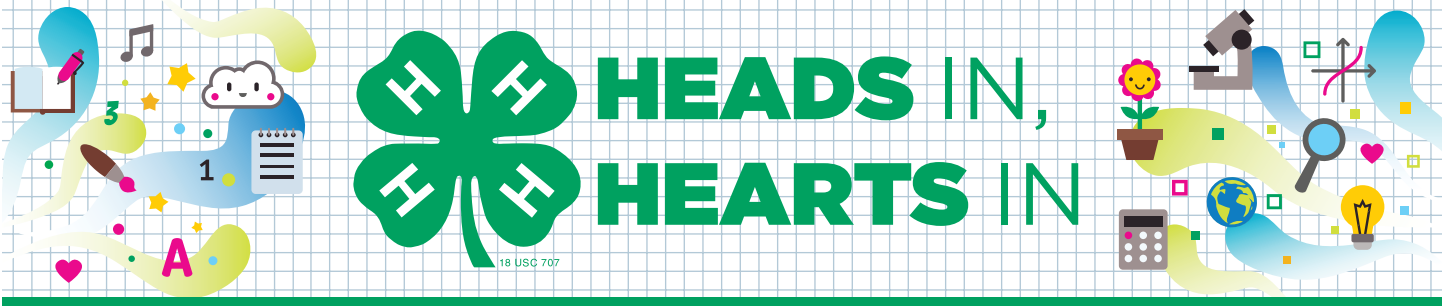


Supplies

- “Guide for Families” handout
- Clear plastic standup display (optional)
- “Die” handout (1 per participant or family)
- “Pie Chart” handout (1 per participant or family)
- Scissors
- Crayons
- Clear tape
- 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 one copy of the “Die” handout for each participant or family.
- ▶ Print one copy of “Pie Chart” handout for each participant or family.
- ▶ Set up the display table and arrange needed supplies.



Pie Die

Guide for Families

Learning Objectives

What you need to know:

A **graph** is a way to show numbers in a chart or picture. A **pie chart** is a way to show information in a picture with a circle divided into sections to represent different parts of a whole.

What you will do and learn:

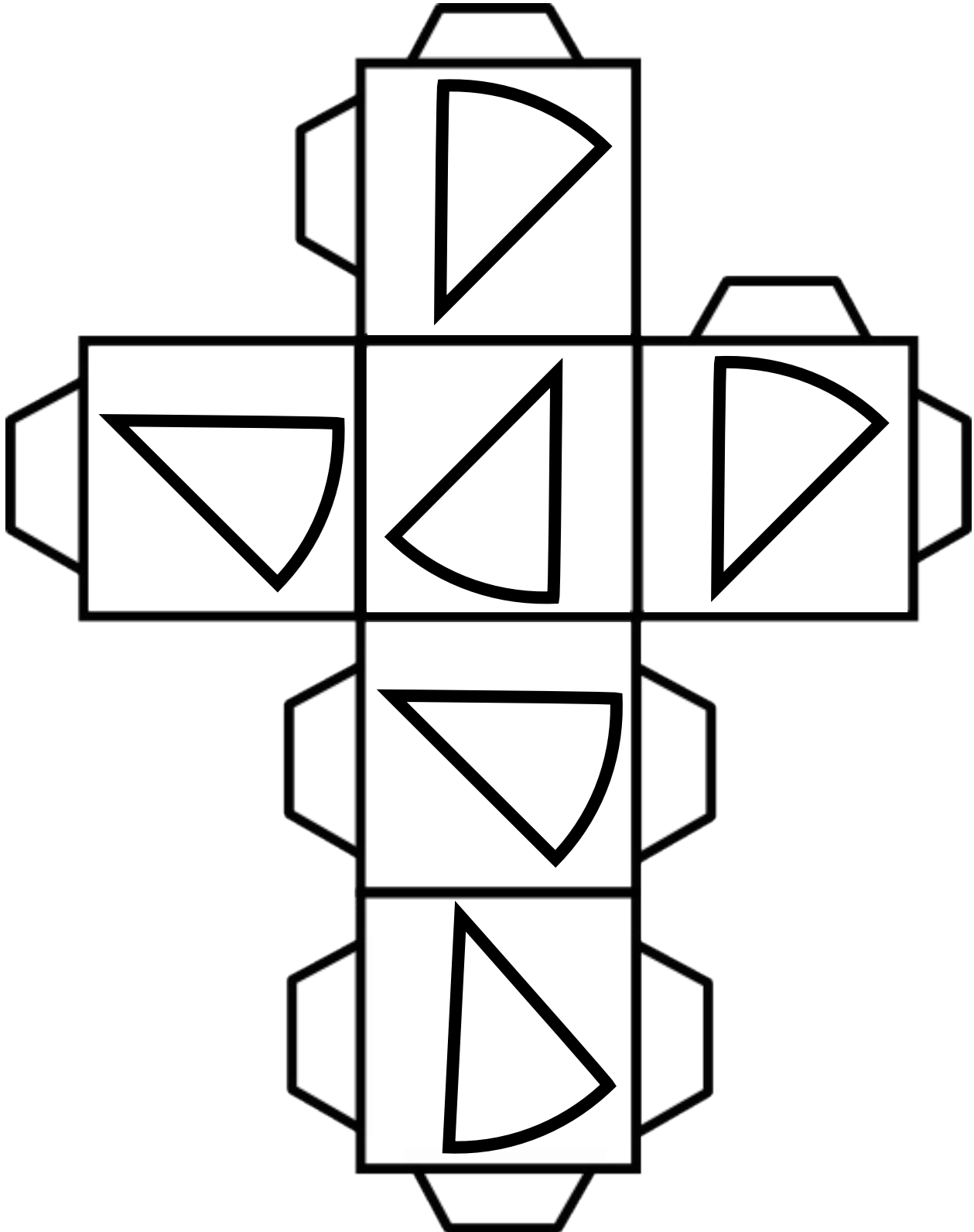
This activity will help you practice counting and grouping items and then displaying or graphing your results. In this activity, you will roll a die to collect information and total how many different colors you roll. You will then use a **pie chart** to display the results.

Instructions

1. Take the “Die” handout and cut around the figure with the scissors.
2. Using the crayons, color each slice of pie on each side of the die a different color.
3. Fold the die and using the clear tape, tape it together until you have a cube you can roll.
4. Roll the die. Look at the color on top of the die. Color in the first little pie shape on the “Pie Chart” handout with that color.
5. Keep rolling the die until all the circles are colored in.
6. Choose one color and count how many circles you’ve colored in with that color. Then fill in that many slices on the pie with the same color.
7. Repeat Step 6 until your pie is completely colored in.
8. Answer the questions on the bottom of the “Pie Chart” handout.

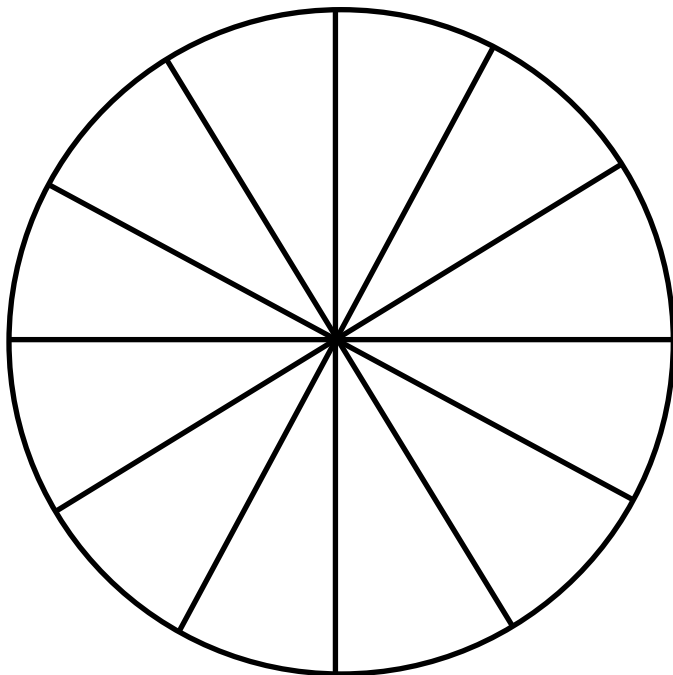
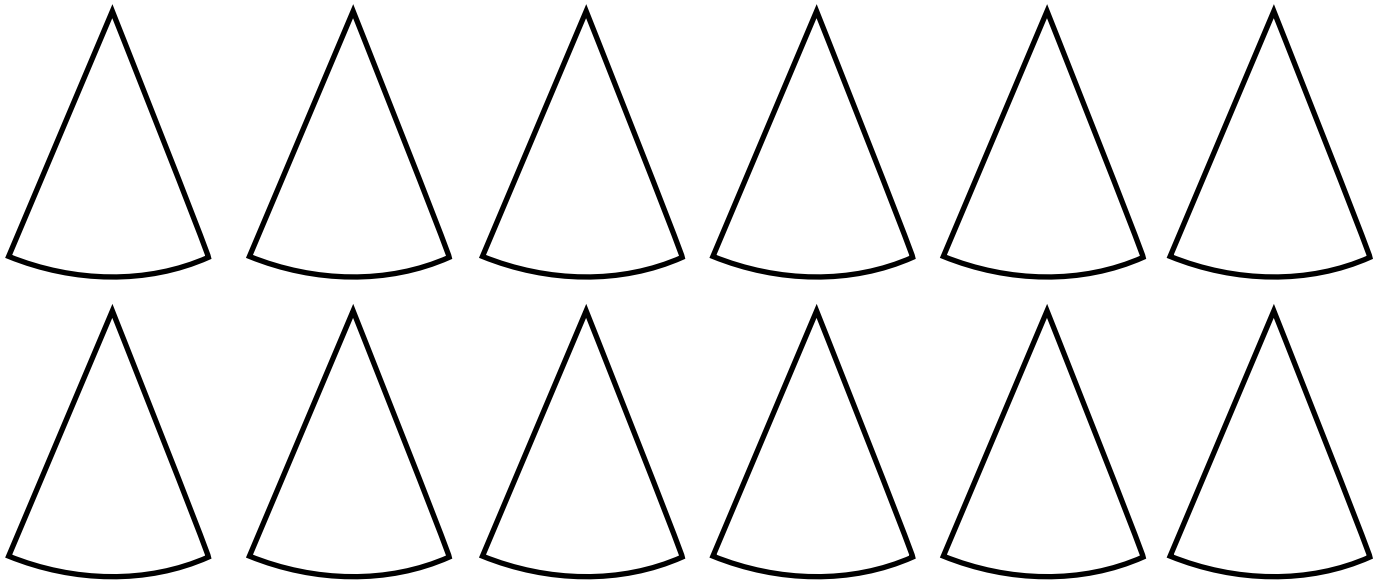
Pie Die

Die Handout



Pie Die

Pie Chart Handout



For older children:

What fraction of the pie is the color _____

Which color has the most slices?

Which color has the least slices?

Are there any colors that have an equal number of slices?
