

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.



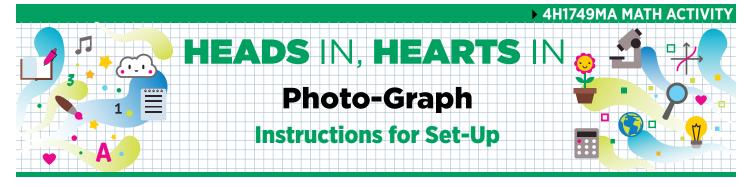
This unit contains the following:

- 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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Supplies

- Guide for Families" handout
- Clear plastic standup display (optional)
- Display table
- □ "Bar Graph" handout
- □ "Photo-Graph" handout
- Crayons or markers

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 several copies of the "Bar Graph" and "Photo-Graph" handouts. Each participant may choose to do one handout or several of them.
- > Set up the display table and arrange needed supplies.

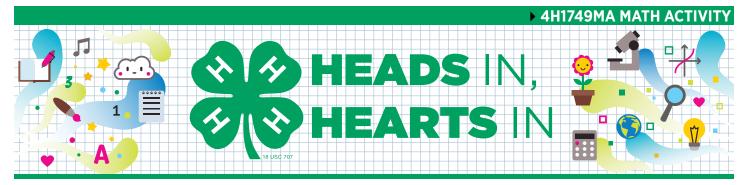


Photo-Graph

Guide for Families

Learning Objectives

What you need to know:

A **graph** is a way to show numbers in a chart or picture. A **bar graph** is used to show information in lines using **columns** and **rows.** A **column** is vertical or upright, and information is shown stacked on top of each other. A **row** is horizontal, and information is displayed in a left-to-right fashion or side by side.

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 identify shapes, count the number of matching pictures, and then use a bar graph to display the results.

Instructions

- 1. Take a "Bar Graph" handout and "Photo-Graph" handout.
- 2. Get several crayons or markers.
- **3.** Look at the shapes in the first column on the "Bar Graph" handout.
- **4.** Notice that there are the same shapes on the picture on the "Photo-Graph" handout.
- 5. Start with the hearts on the "Photo-Graphs" handout. Find all of the hearts in the picture. Count how many hearts there are.
- 6. On the "Bar Graph" handout color in that number of squares in the matching row.
- 7. Now color all of the hearts on the picture.
- 8. Move to the triangles. Find all of the triangles in the picture. Count how many triangles there are.
- **9.** Color in that number of triangles in the matching row on the "Bar Graph" handout.
- **10.** Now color all of the triangles on the picture.
- **11.** Continue to the next shape until all rows and shapes are colored in.



Photo-Graph Handout

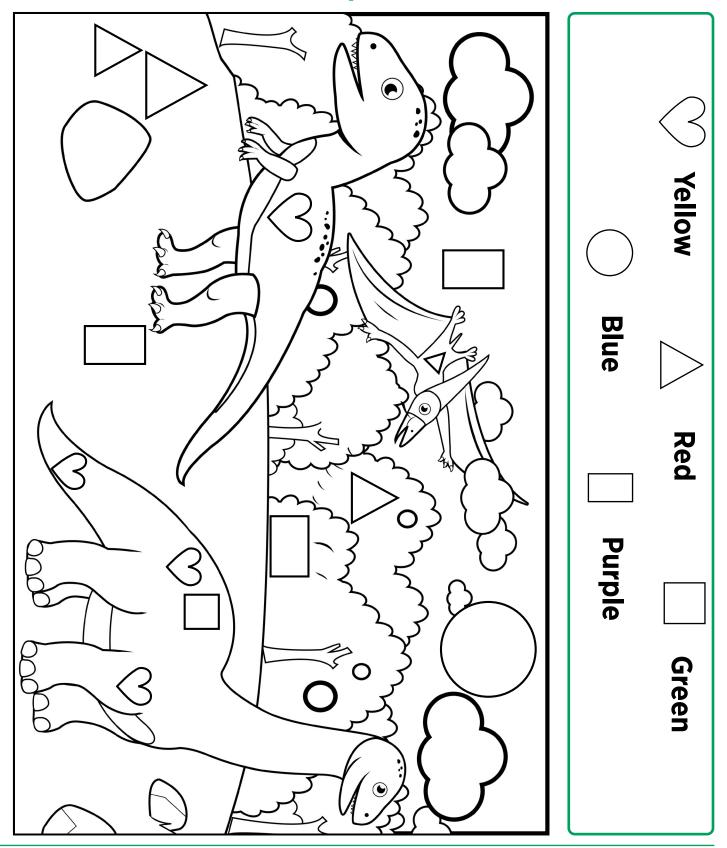


Photo-Graph Handout, continued

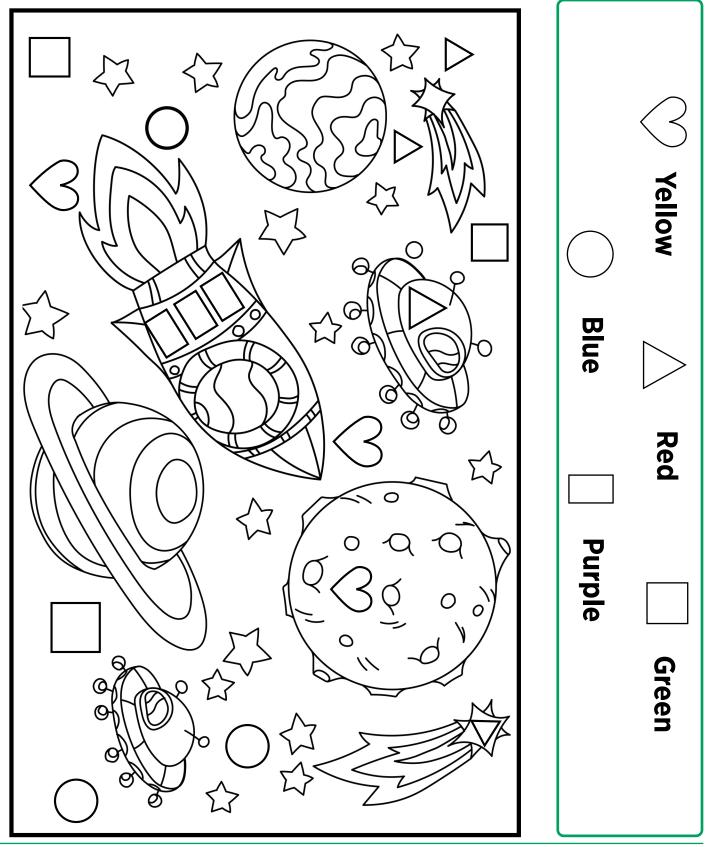
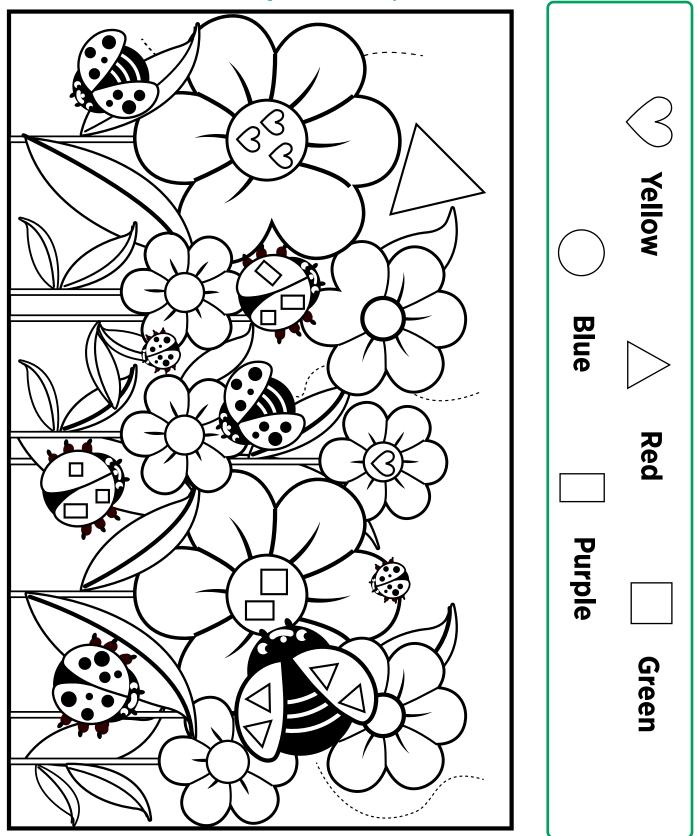


Photo-Graph Handout, continued



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Photo-Graph Handout, continued



Bar-Graph Handout, continued

