

Welcome to my Hive

Build a “honeycomb” that credits those who keep the community humming

(art + social studies) (art + math) (art + science)

In a honey bee community, one can find a level of cooperation and collaborative teamwork that exists nowhere else on earth. Each bee has an important role to play to guarantee the survival of the hive. Some bees work in food production, some in reproduction, some in raising the young, others as hive security officers — there are even bee housekeepers!

In the human world, there are workers who keep the community humming along as well. In this lesson, students are asked to consider the people who provide services and necessities for them, then design a hexagon cell that represents their respective contribution. Cells can be connected to create a honeycomb-shaped display that expresses appreciation and recognition.

The hexagon shape found in honeycomb cells forms a beautiful, strong, and consistent pattern. It's the most efficient shape because it requires the least amount of building material (beeswax) by sharing walls with each neighboring cell and leaving no space between. Each individual cell has a purpose and function.

With a bit of cutting, measuring, and folding, a 3-dimensional hexagon shape is easy to create from strips of sturdy paper or board. Younger ages can use a hexagon-shaped box as a stamp to create a 2-dimensional honeycomb pattern.

GRADES 2-12 Note: Instructions and materials are based upon a class size of 24 students. Adjust as needed.

Materials (required)

Sturdy paper for hexagons; recommend:

[Blick Construction Paper](#), assorted colors, 9" x 12" (11409-); need one sheet per student

[Pacon 2-Ply Tag Board](#), Oak, 9" x 12", 100-sheet pack (13111-1103); need one sheet per student

[Blick Economy White Posterboard](#), 5-ply, 22" x 28" (13109-1102); share two sheets across class

Decorative or Drawing paper for backgrounds; recommend:

[Decorative Paper Assortment](#), 1 lb (12440-1001); share one package across class

[Awagami Creative Washi Paper Pack](#), 1 lb (11325-1001); share one package across class

[Borden & Riley #840 Kraft Paper](#), 50 sheets, 9" x 12" (11519-1023); share one pad across class

Drawing media for cells; recommend:

[Mr. Sketch Scented Twistable Colored Pencils](#), set of 18 (22484-1018); share between 3-4 students

[Sargent Art Gel Pens](#), assorted sets (00847-)

[Blick Pastels](#), assorted sets (20016-)

Materials (optional)

[Papier Mâché Mini Box](#), hexagon, 2-7/8" x 2-7/8" (60001-8361)

[Blick Student Grade Tempera](#), assorted colors (00018-)

[Blick Double-Sided Tape](#), 3/4" (24147-3436)

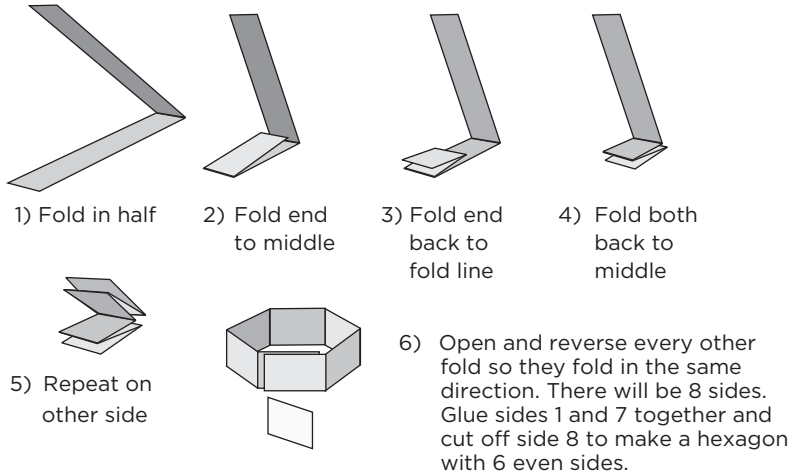


Preparation

1. Invite students to create a list of community workers that can be recognized as part of the "hive." Examples: teachers, parents, custodians, cafeteria staff, and bus drivers. Extended "hive" members could be clerks, doctors, farmers, and others.

Process

1. Cut strips lengthwise from a 9" x 12" sheet of cardstock, tagboard, or heavy construction paper. Vary the widths of the strips from 1/2" to 2".
2. Create multiple hexagon shapes, using either process:
 - a) Measure with a ruler and mark 1-1/2" sections along each strip. Make a fold on each mark.
 - b) Follow the process below:



3. Gather papers for the back side of each hexagon cell. Just about any paper is acceptable, but keep in mind that lightweight papers such as newsprint, tissue paper, or wrapping paper will most likely tear. Try to match the paper with the medium that it will be used with.
4. When the glue has dried on the hexagon, place glue along one edge. As a tidier option, pour glue into a shallow pool on a small plate and set the hexagon into the glue on one side. Place each hexagon on a piece of paper and allow them to dry.
5. When dry, trim away any excess paper.
6. Referring to the list of "hive" workers, design each hexagon cell with one in mind. If desired, students can draw, use photos, or write the name of the person inside. A recommended approach would be to keep the cells simple and fill them with a symbol representing what the person does for the community. It's more anonymous that way, just in case someone is accidentally overlooked.
7. Glue the sides of the hexagons together. Each student's cells can be joined with others temporarily with paper clips or double-sided tape to make a honeycomb-shaped collaborative display.



Step 1: Create hexagon shapes from strips of heavy construction paper or tagboard.



Step 2: Glue to paper to form a hexagon cell.



Step 3: Design each cell with a "hive" worker in mind. Join cells into a honeycomb pattern by gluing the sides of the hexagons together.

Options for Early Elementary Students

1. Instead of building individual cells, use a hexagon-shaped kraft paper box. Pour paint into a small plate and have students hold the solid back side of the box, place the other open side in the paint and stamp hexagon shapes onto paper. Fill the paper with as many shapes as possible without going over the edge. Try to place stamps side by side, without gaps between.
2. After the paint has dried, use drawing media to design the cells as above.
3. Cut the honeycomb shape out and join it together with masking tape on the back side for a collaborative display.



National Core Arts Standards - Visual Arts

Creating

Anchor Standard 2: Organize and develop artistic ideas and work.

Responding

Anchor Standard 7: Perceive and analyze artistic work.

Connecting

Anchor Standard 10: Synthesize and relate knowledge and personal experiences to make art.

Anchor Standard 11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.