COMB SWEET HOME

Focus Lesson: Comb Sweet Home

Materials:

4-5 empty egg cartons
The Magic School Bus: Inside a Beehive by Joanna Cole & Bruce Degen
Hexagon cut-out template
Butcher paper
Construction paper
Scissors
Pencils
Tape or glue

Time: 50 minutes

***Common Core Standards:**

CCSS.ELA-LITERACY.RI.2.1
Ask and answer such questions as *who, what, where, when, why*, and *how* to demonstrate understanding of key details in a text.

CCSS.MATH.CONTENT.2.G.A.1
Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.[1] Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

Thinking Skill: Group, Visualize, Organize

Objective:

Students will be able to visualize and explain the structure of a honeycomb.
Students will relate the activities of honeybees.
Students will create their own class honeycomb model.

Connection:

Our honey and most of our sweet treats originate from places in nature. Bees, living in a hive, work hard to create honey in a structure called a honeycomb. Bees live in this wax structure and work in rooms called chambers. The comb is made up of six-sided chambers called cells. Bees work inside these honeycombs to make the honey most of us have learned to enjoy!

Explicit Instruction:

In order to understand the design of a honeycomb, we will create our own class honeycomb using hexagons. A hexagon is a six-sided shape. Just like the insects, we will create a product together using cell patterns and sweet knowledge!

Guided Practice:

Read *The Magic School Bus: Inside a Beehive* by Joanna Cole & Bruce Degen and discuss specifically pages 24-36. Project an image of a honeycomb onto the board, or pass around a photo.

After reading, demonstrate the idea of a three-dimensional cell by linking a few empty egg cartons together.

Let the students hold the cartons and imagine the cells. The cells are like rooms for the bees-this is where they develop from larva into full workers.

Independent Practice:

Explain that students will be constructing a one dimensional model of a beehive.

Assign students one of four colors of construction paper. Each color will represent eggs, larvae, pupae, or honey. Ask students to use the cell pattern (hexagon shape) to cut out their cell. Have them put their name on their assigned cell.

Place a large piece of butcher paper on a table or on a board. Have students attach their cells to the paper, making sure to CONNECT THEIR CELLS with one another- just like in a comb. Make clear to students that they should arrange the cells so those containing eggs, larvae and pupae are grouped together toward the middle, while honey cells are constructed toward the outside.

After the model is constructed- ask each group of cells (eggs, larvae, pupae, and honey) to explain as a group where they fit into the development and lifespan of bees.

Reflection – Group Share:

Take a look at the class model. Wonder: What might it be like to live inside a comb like this? Why do the cells have six sides? Imagine how much work it takes for bees to produce honey.

Reading list:

The Magic School Bus: Inside a Beehive by Joanna Cole & Bruce Degen
The Life and Times of the Honeybee by Charles Micucci

Teacher Note: