

Objectives

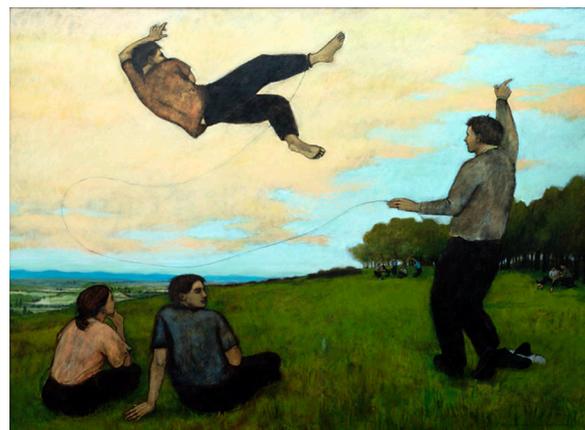
- Students will study the life cycle of a butterfly and other winged insects.
- Students will use colored shapes to create symmetrical patterns.
- Students will group objects in odd and even numbers and understand how both groups can create sums.
- Students will use rulers to measure objects and compare objects.
- Students will design and create 3-D winged insects.
- Students will explore the artwork of Claes Oldenburg and James Christensen
- Students will explore the new media of paper mache.
- Students will use paint, oil pastel, crayons, and other media to add color to their insects

Activity

1. Show students pictures of winged insects, especially butterflies and dragonflies. Discuss how these living organisms change over time. Show the life cycle of the butterfly and other insects if desired.
2. Have students find similarities and differences in the winged insects. Explain that symmetry means that something is the same on both sides. Point out that the wings are the same on both sides. Have students find examples of symmetry.
3. Show students the artwork of Claes Oldenburg and ask them to identify what is different about the work. Oldenburg has taken everyday objects and blown them up to colossal sizes. Tubes of toothpaste are the size of humans, matchbooks as big as buildings and safety pins as large as tall trees. By changing the scale of ordinary objects Oldenburg has introduced a comical element of whimsy. Show images by James Christensen and ask students to find the ways that this artist has introduced whimsical ideas. He adds wings, fun patterns, and imaginary creatures.
4. Have students use the rulers to measure objects similar to those found in Oldenburg's sculptures (safety pins, clothespins, matchbooks, spoons and so forth.) Make a list of common measurements from those items. Then show students the measurements of the sculptures. Are the sculptures a little bit bigger or a whole lot bigger?



Claes Oldenburg, google image



Brian Kershisnik, *Flight Practice with Instructor*, 2000

Materials

- Small plastic lidded containers
- Sponges
- White glue, Masking tape
- Newspaper
- Paint
- Small and Large Paper
- Oil pastels, Crayons, Markers
- Pipe cleaners, yarn
- Rulers
- Assorted wood or paper shapes
- Images of winged insects
- Claes Oldenburg images
- Images from the Springville Museum of Art

Images from the Museum

- Brian Kershisnik, *Flight Practice With Instructor*,
- James Christensen, *The Rhinoceros*

State Core Standards - 2nd Grade

Science Standard 4

Life Science. Students will gain an understanding of Life Science through the study of changes in organisms over time and the nature of living things.

Math Standard 2.MP.5

Use appropriate tools strategically. Consider the tools that are available when solving a mathematical problem, whether in a real-world or mathematical context. Choose tools that are relevant and useful to the problem at hand, such as drawings, diagrams, technologies, and physical objects and tools, as well as mathematical tools such as estimation or a particular strategy or algorithm.

Math Standard 2.MP.7

Look for and make use of structure. Recognize and apply the structures of mathematics such as patterns, place value, the properties of operations, or the flexibility of numbers. See complicated things as single objects or as being composed of several objects.

Math Standard 2.OA.3

Determine whether a group of objects (up to 20) has an odd or even number of members, (for example, by pairing objects or counting them by twos). Write an equation to express an even number as a sum of two equal addends.

Math Standard 2.MD.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

Visual Arts

Strand: CREATE (2.V.CR.)

Students will generate artistic work by conceptualizing, organizing, and completing their artistic ideas. They will refine original work through persistence, reflection, and evaluation.

(Standards 2.V.CR.1-5)

Activity (continued)

5. Go back to the pictures of insects, and explain that students will be creating three dimensional insects that will be much larger than life, just like Oldenburg's sculptures. Have them measure some pictures of dragonflies and butterflies with the ruler. Show students that butterflies and dragonflies have the same basic long oval shaped bodies.
6. Give each student a large piece of newspaper and a few long strips of masking tape. Students will squish the newspaper into a long oval shape and wrap loosely with masking tape. Then they can measure their newly created forms with a ruler to see how much longer and wider they are than the original.
7. Remind students that insect wings are symmetrical, and that helps them to fly. Using their newly created insect bodies, students will build wings out of colored blocks or colored paper shapes. Have them group objects by odd numbers of blocks on each side, then even numbers on each side. How can they arrange the blocks into different patterns that are symmetrical? If they have five blocks on one side, how many blocks do they need to have on the other side?
8. Show students how to finish the insect bodies. Cut strips of newspaper that are about 6 inches long and 1 inch wide. Place a sponge in the bottom of a plastic container and pour white school glue onto the sponge. (This is best done ahead of time so that the glue has a chance to sink into the sponge) Once the glue has completely been swallowed by the sponge you are ready to begin. Place a strip of newspaper on top of the sponge and tap lightly. A small amount of glue will adhere to the strip on one side. Repeat the process until one side of the strip is covered with glue. Attach the strip to the insect body by wrapping it around the original form. Repeat until you cannot see any of the masking tape or the original crumpled newspaper. Because the newspaper is coated on only one side with glue it will dry quickly and leave very little mess. When you have finished the process, put the lid on the plastic container and you can continue to use it for years.



Google image

9. Once the insect body is dry students can paint it as desired. Encourage students to use whimsical patterns and designs like James Christensen.
10. Use large paper and have students design and cut wings. Students can choose to stick with the traditional shape and number of wings, or they can add extra wings of different shapes and sizes. Have them use oil pastel, crayon, paint, markers, or any other medium to add symmetrical patterns to the wings.
11. Attach wings, pipe cleaner legs, and antennae with hot glue (best done by the teacher).
12. Attach yarn to the body shape and hang the enormous insects in a swarm from the ceiling.

Assessment

During the discussion component, the teacher should carefully monitor class participation, being careful to involve the whole class in some way. A simple checklist next to the class roll will ensure that each student is given the opportunity to participate or formulate an opinion during the discussion. For the artwork, the teacher will discuss and evaluate student thought processes and execution on a scale of 1-5. Five=Magnificent, Four=Great, Three=Good, Two=Standards were not met, One=Needs Improvement. Possible criteria may include: quality work, shows evidence of symmetry, shows repetition and pattern, followed directions.

Sources

<http://oldenburgvanbruggen.com/largescaleprojects/lsp.htm>

Variations

Have students create their own whimsical creature. Students can use the same basic idea and construction, but can invent their own shape to begin.

Extensions

Invite students to work together on a larger scale. Students can use this same basic technique to complete enormous sculptures working as a team.



Student example



James C. Christensen, *The Rhinoceros*, 1981, oil on canvas



Brian Kershisnik, *Flight Practice with Instructor*, 2000



James C. Christensen, *The Rhinoceros*, 1981, oil on canvas