

Symmetry Space



Lesson adapted from Susan Riley's
Lesson Seeds, EducationCloset

Grade Level

4th Grade

Key Vocabulary

- Line symmetry
- Rotational symmetry
- Reflective symmetry
- Positive/negative space

Materials

- Examples of art that showcases positive/negative space
- Tru Ray® Construction Paper Assortment, item #103031
- Creativity Street® Glue Sticks, item #AC3387-30
- Prang® Fine Line Markers, item #80714

Objective

Students will use positive and negative space in their art to show symmetry.

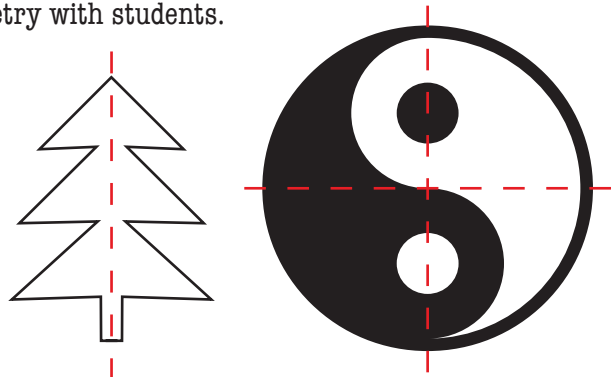
Standards

4.G.A.3

Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Engagement

1. Study some examples of artwork that uses positive and negative space. M.C. Escher's tessellations and the Rubin Vase are great examples. Encourage students to think of things they've seen in their everyday life that uses positive and negative space, like the yin/yang symbol, or logos.
2. Explain the concept of notan to students. Notan is a Japanese word meaning "dark-light", and it is used to describe the balance between positive and negative space in a design. The yin/yang symbol is a great example of balancing positive and negative space, and symmetry.
3. Review line symmetry, rotational symmetry, and reflective symmetry with students.

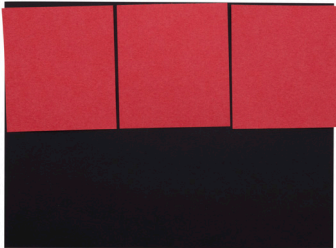


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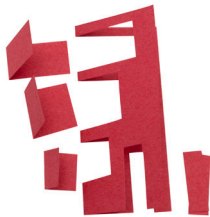
Step 5



Step 6



Step 7



Step 8



Step 9



Activity

- Show students a finished project and describe the spots where the artist included symmetry. In this example, each smaller red section has a line of symmetry running through its center, and the positive and negative shapes create a line of symmetry horizontally through the center of the black paper.
- Distribute one 9 x 12 inch piece of construction paper, and one 12 x 4.5 inch piece of construction paper in a contrasting color.
- Instruct students to cut the smaller piece of paper into three equal parts.
- Demonstrate folding one of the small rectangles in half (to add another element of symmetry), and cutting shapes out of it to use as the positive and negative shapes in their artwork.
- Have students adhere the shapes to the 9 x 12 piece of paper, using the pieces they cut out as the positive space on one half, and the piece they cut it from as the positive space on the other half. This is a great time to talk discuss line symmetry, and reflective symmetry again.
- Students should repeat the process with the other two rectangles to complete their artwork.

Assessment

Check that student artwork uses positive and negative space to convey symmetry.

Extension

Have students use markers to add symmetrical details to the positive spaces with symmetrical lines and shapes.

Extension

