

Desperately Seeking Symmetry

SLIDE NAVIGATION

1

2

3

4

5

6

Next

1. Question & Research Task

Geometry is all around us. It is not only in objects but can also be found in written text. Print your name in capital letters on a piece of paper.

Do you see any letters that are symmetrical?

Look at the capital letters of the alphabet to identify which ones are symmetrical.

1. With your teacher let's graph our results.



Image Source: www.wordle.com

In this Slam Dunk, you will conduct brief, focused research to respond to the inquiry question:

Where do we find symmetry in our everyday life?

2. Information Sources

First, let's watch a video on Symmetry (Discovery Education Video).

Next, we'll play two games to make sure we understand symmetry:

Symmetry Matching

Symmetry Sorting

Finally, let's practice working with symmetry.

- Be a Symmetry Artist



Image Source: www.clipart.com

3. Student Activity

Geometry is all around us. Take a minute and look around to find different shapes that you see in your room. Look for things that are symmetrical. Raise your hand when you have found five objects that show symmetry.

Now that you have a better understanding of symmetry, let's go on a symmetry hunt. As we tour the school, use the camera on your device to take pictures of objects that have symmetry.

- Take a picture of one human-made object with symmetry and one natural object of symmetry.
- Your teacher may direct you to draw the items if no cameras are available.



Image Source: www.clipart.com

4. Assessment Activity

Where do we find symmetry in our everyday life?

After taking pictures from your walk around the school, you will display the pictures on the interactive white board or use the template to show the line of the symmetry to the rest of your learning community.

Oral Presentation: Share your photos and your findings about symmetry to your class. Read the rubric to prepare to give your best oral presentation.



Image Source: www.clipart.com

5. Enrichment Activities



Image Source: Clipart.com with subscription

Here are additional websites that can be used for further exploration.

- Be a [Symmetry Artist](#)
- [Kaleidoscope](#) Fun

BrainPOP Jr. and BrainPOP Videos

- [Slides, Flips, and Turns](#)
- [Transformations](#)

6. Teacher Resources

Learning Standards Alignment

Content Learning Standards

Use research skills in order to evaluate, select, record, and reorganize information.

Common Core State Standards for English Language Arts & Literacy

Reading: 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Writing: 7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

AASL Standards Framework for Learners Inquire: Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems.

Think: Learners display curiosity and initiative by:

I.A.2 Recalling prior and background knowledge as context for new meaning.

Create: Learners engage with new knowledge by following a process that includes:

I.B.1 Using evidence to investigate questions. I.B.3 Generating products that illustrate learning.

Share: Learners adapt, communicate, and exchange learning products with others in a cycle that includes:

I.C.1 Interacting with content presented by others.

Grow: Learners participate in an ongoing inquiry-based process by:

I.D.2 Engaging in sustained inquiry.

P21 Framework: 21st Century Student Outcomes

3. Information, Media & Technology Skills: Information Literacy: Access information efficiently and effectively; Use information accurately and creatively for the issue or problem at hand.

ICT Literacy: Use technology as a tool to research, organize, evaluate and communicate information.

SLIDE NAVIGATION

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
----------	----------	----------	----------	----------	----------

Grade 4 Math

Time Frame: Two 50-minute class periods

Differentiation strategies for this lesson:

- Have students use learning supports provided in any [BCPS-licensed Digital Content](#) included in this lesson. Refer to [Digital Content Snapshots & Support resources](#) for as needed.

Notes to the teacher:

- Collaborate with your school library media specialist to plan and implement this lesson.
- Provide students with login information as needed to authenticate BCPS Digital Content. Login information is available on the **BCPS Digital Content** page found via the [Apps Portal](#)
- The graph on slide #1 is meant for the teacher to complete with the students