



---

## 2: Isle of Shapes

---

### Based on the Puerto Rico quarter reverse

---



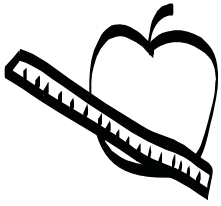
#### OBJECTIVE

Students will identify basic geometric shapes and differentiate between two-dimensional (flat) and three-dimensional (solid) shapes.



#### MATERIALS

- 1 overhead projector (optional)
- 1 overhead transparency (or photocopy) of the following:
  - “Puerto Rico Quarter Reverse” page
  - “United States and Territories Map” from the Resource Guide
  - “Puerto Rico Map”
- Copies of the following:
  - “Puerto Rico Quarter Reverse” page
  - “Classroom of Shapes” worksheet
  - “So Many Shapes!” worksheet
  - “United States and Territories Map” from the DC and Territories Resource Guide
  - “Puerto Rico Map”
- 1 class map of the United States
- 1 copy of a text that gives information about Puerto Rico, such as:
  - *Puerto Rico A to Z* by Jeff Reynolds
  - *Puerto Rico* by Elizabeth Zapata
  - *Puerto Rico: The People and Culture* by Erinn Banting
- 1 copy of a text that gives information about basic shapes, such as:
  - *Shape of Things* by Dayle Ann Dodds
  - *The Shape of Me and Other Stuff* by Dr. Seuss
  - *Round Is A Mooncake: A Book of Shapes* by Roseanne Thong
  - *When a Line Bends... A Shape Begins* by James Kaczman
  - *Cylinders Around Town* by Nathan Olson
- Chart paper
- Markers
- Examples of cylinders (such as food cans, oatmeal boxes, or potato chip containers)
- Overhead markers
- Pencils
- Crayons



---

# Isle of Shapes

---



## PREPARATIONS

- Make an overhead transparency (or photocopy) of each of the following:
  - “Puerto Rico Quarter Reverse”
  - “United States and Territories Map” from the DC and Territories Resource Guide
  - “Puerto Rico Map”
- Make copies of each of the following:
  - “Puerto Rico Quarter Reverse” (1 per student)
  - “Puerto Rico Map” (1 per student)
- “United States and Territories Map” from the DC and Territories Resource Guide (1 per student)
  - “Classroom of Shapes” worksheet (1 per student)
  - “So Many Shapes!” worksheet (1 per student)
- Locate a text that gives information about Puerto Rico (see examples under “Materials”).
- Locate a text that gives information about shapes (see examples under “Materials”).
- Gather examples of a cylinder for Session 2.
- Create a T-chart for Session 2 with drawings of shapes in one column and a blank second column for students’ examples.



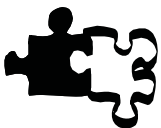
## GROUPINGS

- Whole group
- Individual work



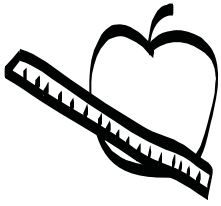
## CLASS TIME

- Three 20- to 30-minute sessions



## CONNECTIONS

- Mathematics
- Art
- Social Studies



# Isle of Shapes



## TERMS AND CONCEPTS

- Quarter
- Territory
- Enchanted
- Three-dimensional (solid) shapes
- Obverse (front)
- Island
- Geometry
- Reverse (back)
- Sentry box
- Two-dimensional (flat) shapes



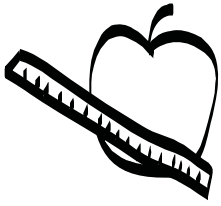
## BACKGROUND KNOWLEDGE

Students should have a basic knowledge of shapes.

## STEPS

### Session 1

1. Display the “United States and Territories Map” overhead transparencies as you explain to the students that the United States is made up of fifty states, five territories, and the District of Columbia, which is the nation’s capital. When defining “US territory” (lowercase “t”) for your students, the United States Mint recognizes and uses the Department of the Interior’s definitions found at [www.doi.gov/oia/Islandpages/political\\_types.htm](http://www.doi.gov/oia/Islandpages/political_types.htm). Add your definition to the chart paper.
2. Describe the District of Columbia and United States Territories Quarters Program for background information, if necessary, using the example of your own state’s or territory’s quarter. Then display the transparency or photocopy of the “Puerto Rico Quarter Reverse,” mentioning that an image must be specially chosen to be on a quarter. Tell the students that the back of a coin is called the reverse, and “obverse” is another name for the front. Locate Puerto Rico on the overhead transparency and the classroom map. Note its position in relation to your school’s location.
3. Tell the students that Puerto Rico is an island. Define “island” as land surrounded entirely by water and add the definition to the chart paper along with a visual cue.
4. Introduce the students to the selected text on Puerto Rico. Preview the text and illustrations and allow students to generate observations about Puerto Rico.
5. Read the text. During the reading, attend to any unfamiliar vocabulary.
6. After the reading, review the image on the coin. Ask the students why the images may have been chosen for the coin and why they may be important to Puerto Rico.
7. Explain that the symbols on the coin represent things that are important to the people of Puerto Rico. Explain that the sentry box is a small shelter for a guard or a soldier who keeps watch over a camp or building. Tell the students that in San Juan the sentry boxes were built along with walls of stone to protect the capital city from attacks by sea. The flower is the hibiscus, which grows in Puerto Rico. Add the definitions and a visual cue to the island chart paper. The inscription *Isla del*



---

# Isle of Shapes

---

*Encanto* means Island of Enchantment, in Spanish, which is how many people refer to Puerto Rico. Ask the students why that may be a good nickname for Puerto Rico.

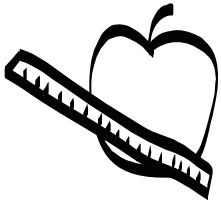
8. Distribute a “Puerto Rico Quarter Reverse” worksheet to each student. Direct the students to color the image. Have the students draw and write about their favorite thing they learned about Puerto Rico on the other side of the worksheet.
9. Review the worksheets as a class and collect them.

## Session 2

1. Introduce the students to the selected text on shapes. Preview the text and illustrations and allow students to generate observations about shapes.
2. Read the text. During the reading, attend to any unfamiliar vocabulary.
3. After the reading, display the T-chart on shapes. Ask the students to identify the shape and give some examples of shapes that they see in the classroom. Record student responses in the second column of the chart paper and label the corresponding shape.
4. Display the “Puerto Rico Quarter Reverse” overhead transparency. Review the image on the coin. Ask the students what shapes they see in the image. Introduce the students to the term “cylinder.” Explain that a cylinder is a three-dimensional, or solid, shape. Display the examples of a cylinder that you collected. Ask the student which image on the coin has the shape of a cylinder.
5. Discuss the other images on the coin and the shapes they represent. Outline the shapes on the image with colored overhead markers to highlight the shape for the students.
6. Review the shape chart from earlier in the session. Ask the students what shapes they see in the classroom (such as a circular clock and rectangular door).
7. Distribute a “Classroom of Shapes” worksheet to each student.
8. Direct the students to choose one thing in the classroom of each shape and draw it in the box next to the corresponding shape.
9. Allow an appropriate amount of time for them to complete this activity.
10. Review the worksheets as a class and collect them.

## Session 3

1. Review the previous sessions and discussions on shapes. Display the shape chart from Session 2.
2. Tell the students that now they are going to play the “Body Shapes Game” in small groups by making the shape you call out with their bodies. Make room for this activity if necessary. Divide the class into small groups.

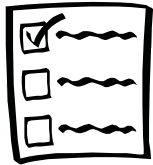


---

# Isle of Shapes

---

3. Once you are done playing the “Body Shapes Game,” distribute the completed “Classroom of Shapes” worksheets and a “So Many Shapes” worksheet to each student.
4. Direct the students to draw a picture using shapes and label each shape. They may use the pictures that are on the “Classroom of Shapes” worksheet or come up with new ones.
5. Allow an appropriate amount of time for them to complete this activity.
6. Review the worksheets as a class, then collect and display them.
7. Review shapes as a class.



## ASSESSMENT

- Take anecdotal notes about the students’ participation in class discussions.
- Evaluate the students’ worksheets for understanding of the lesson objectives.



## ENRICHMENTS/EXTENSIONS

- Have students create three-dimensional shape pictures.
- Have students research other territories and what buildings and structures may be unique to them.
- Have students go on a nature walk to find shapes in their environment.
- Have students further explore shapes using tangrams.



## DIFFERENTIATED LEARNING OPTIONS

- Allow students to work in pairs.
- Allow students to use a scribe to label their worksheets.
- Allow students to use pattern blocks or cut-out shapes to complete their worksheets.



## CONNECTION TO WWW.USMINT.GOV/KIDS

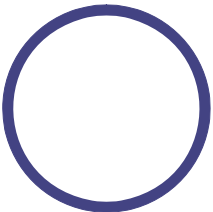

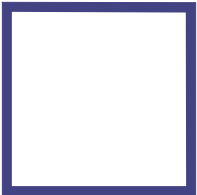

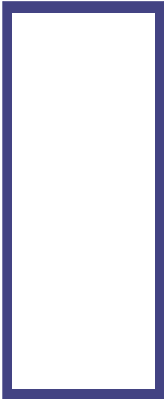


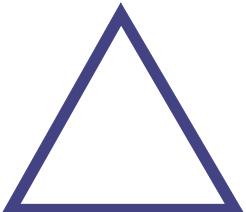

- Have students learn more about other territories with the District of Columbia and US Territories lesson plans at [www.usmint.gov/kids/teachers/lessonPlans/50sq/2008/\\_k01-2.pdf](http://www.usmint.gov/kids/teachers/lessonPlans/50sq/2008/_k01-2.pdf).
- Have students learn more about shapes with the 2007 generic quarter lesson plan at [www.usmint.gov/kids/teachers/lessonPlans/50sq/2007/\\_k01-6.pdf](http://www.usmint.gov/kids/teachers/lessonPlans/50sq/2007/_k01-6.pdf).



Name \_\_\_\_\_

# Classroom of Shapes

**Directions:** For each of the shapes below, draw something you see in your classroom that has a similar shape. Label the item below the drawing.

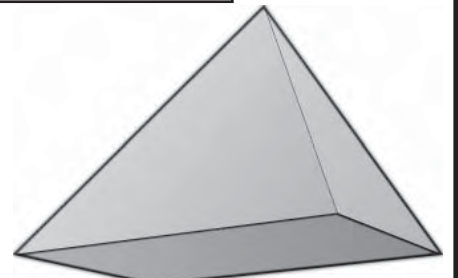
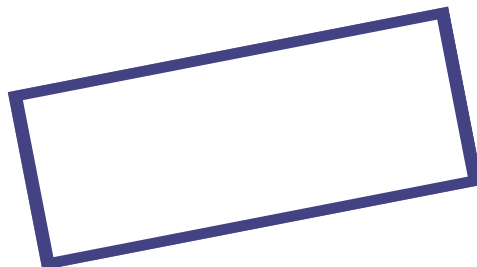
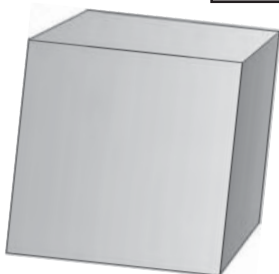
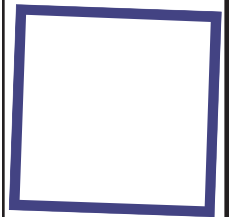
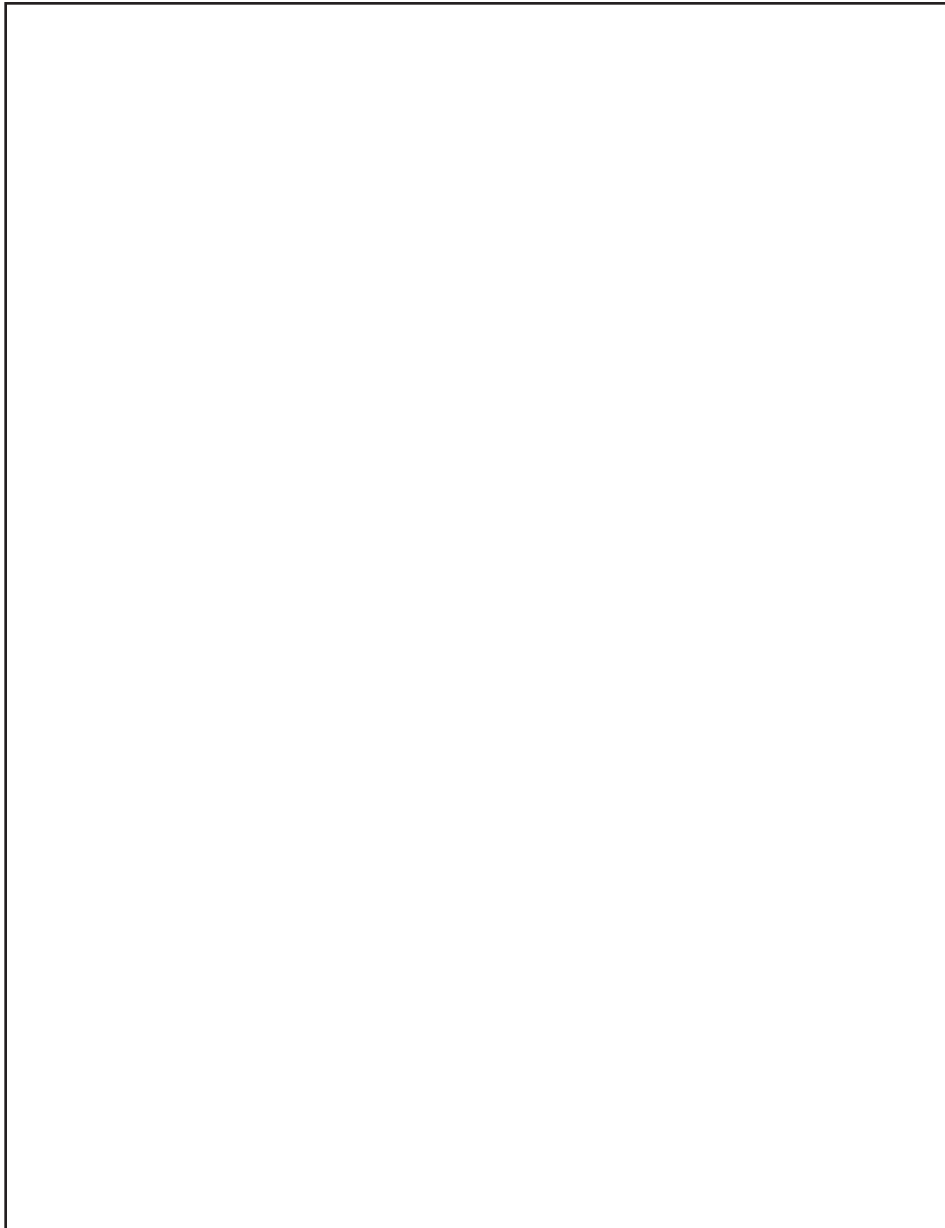
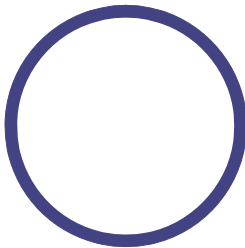
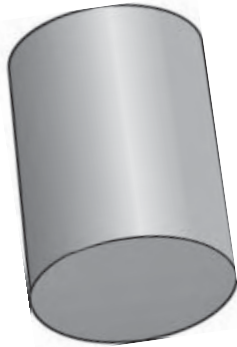
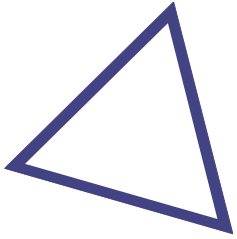
FLAT		SOLID	
	_____		_____
	_____		_____
	_____	 	_____
	_____		_____

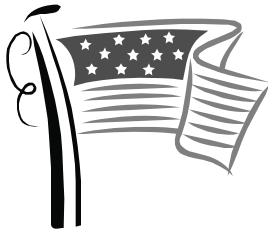


Name \_\_\_\_\_

# So Many Shapes!

**Directions:** Draw a picture using shapes and label each shape.





# Puerto Rico Quarter Reverse

