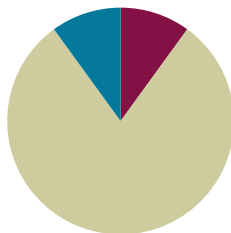


Lesson 10

Objective: Culminating Task—collaborative groups create displays of different flat shapes with examples, non-examples, and a corresponding solid shape.

Suggested Lesson Structure

■ Fluency Practice	(5 minutes)
■ Concept Development	(40 minutes)
■ Student Debrief	(5 minutes)
Total Time	(50 minutes)



Fluency Practice (5 minutes)

- Groups of Shapes **K.G.2** (3 minutes)
- 5-Group Hands **K.CC.2** (2 minutes)

Groups of Shapes (3 minutes)

Note: The concept of a group is foundational for the concept of a unit. There are seven objects, but it is one group, one unit; conduct the activity as in Lesson 5, but with solid shapes.

5-Group Hands (2 minutes)

Materials: (T) Large 5-group cards (Lesson 1 Fluency Template 3)

Conduct the activity as outlined in Lesson 1, but now have students say the number sentence (for example, 5 and 2 make 7) as they show the 5-groups on their hands.

Note: Students will see themselves improve as they continue working with numbers. Invite them to notice their improvement and celebrate small successes and small steps towards mastery.

Note: The Fluency Practice activities have been shortened, assuming more time will be needed for the culminating task.

Concept Development (40 minutes)

Preparation: Today's lesson incorporates elements of all of the Module 2 lessons. As in the culminating lesson for Module 1, students set up stations or exhibits displaying their knowledge of the shapes and solids they have studied. They represent each of the five shapes in a different display and associate geometric solids with the appropriate shapes, so there will be at least five stations. To keep the number of students

working at each station to a small group size, more stations can be added.

Materials: (T) Bag of flat shapes containing a triangle, a rectangle, a square, a circle, and a hexagon (as many as necessary in order to assign each group or pair of students one shape) (Lesson 5 Template)
(S) Work mat (Activity Template); sets of cutouts from the module lessons; small pieces of modeling clay; geoboards and rubber bands; dot paper and markers; pattern blocks; paper and glue stick; crayons, pencils; Wikki Stix (if available); set of geometric solids; collection of pictures from catalogs, magazines, or newspapers representing the shapes and solids in real life situations

- T: We have been studying many flat shapes and solids. Today, you will get the chance to show what you know. We're having a Shape Fair!
- T: I'm going to call you and your partner up to choose a shape from my bag. You will work with your partner to create an exhibit about that shape. You will go to a station and use the materials there to show what you know. You have cutouts, pictures, craft supplies, and drawing materials. What are some things you could do to show what you've learned about a shape?
- S: We could draw it. → We could make it on a geoboard. → We could make it with our Wikki Stix! → We could have a shape hunt with the pictures. → We could cut it out.
- T: There will be a bag of solids at your station as well. Could they help you to show your shape?
- S: We can show the faces that match our shape. We could trace the solids.
- T: Yes, some of the solids might show your shape too! One last mission: I have a work mat for you to use. On the mat, the left side says, "These are (____)." The other side says, "These are not (____)." (Hold up work mat and demonstrate appropriate placement.) You will draw your shape in the blank spaces and then use this mat to do some sorting. Show things that do and don't match your shape in order to help your visitors understand the shape better.
- T: I will give you time to work on your exhibit, and after 20 minutes, I will give you a chance to visit the other exhibits in our Shape Fair. Students A, B, and C, please come choose your shape and get started at your station.

MP.6

Note: Use this time as an *informal assessment* tool for the close of the module. Circulate to observe student discussion and work. What representations are easiest and most familiar to the students? Are there some that might need review? What vocabulary and language do the students use in their discussions? Do they exhibit thorough understanding of the shapes and solids?

- T: (When preparation time is up, allow students to rotate through the other exhibits.) Now, you may look at the rest of the Shape Fair. Talk with your partner about what you see at each station. What are the shapes and solids shown at each exhibit? How do you know? What ways did your friends choose to show them?

MP.3

MP.4

Suggestion: This would be a wonderful opportunity to have some other teachers, older students, or administrators come into the classroom to view the exhibits at the end of class. The students could explain their work to the visitors as an extension of the lesson.

Problem Set (0 minutes)

There is no Problem Set in this lesson to maximize available time for the culminating task.

Student Debrief (5 minutes)

Culminating Task—collaborative groups create displays of different flat shapes with examples, non-examples, and a corresponding solid shape.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience.

You may choose to use any combination of the questions below to lead the discussion.

- In what ways did you and your partner represent your shape?
- Which materials were easiest for you to use to explain your shape? Why?
- How did you decide which solids to use to represent your shape?
- Which shape(s) do you think were trickiest to make? Why?
- What new (or significant) math vocabulary did we use today to communicate precisely?

Name _____

Date _____

Shape Up Your Kitchen!

Search your kitchen to see what shapes and solids you can find. Make a kitchen-shaped collage by drawing the shapes that you see and by tracing the faces of the solids that you find. Color your collage.

Name _____

Date _____

These are (____).

These are not (____).

work mat