**Objectives**

Students will:
- Review basic shapes.
- Recognize that basic shapes are the building blocks for creating structures.
- Relate basic shapes to the Kearns Mansion.
- Create their own building with basic shapes.

**Student Instruction**

1. Show students Clue 11, Basic Shapes review sheet. Ask students to name each of the shapes.

2. Play an observation game. Divide students into groups. Ask each group to identify and record the shapes they observe in your classroom. Have groups report their findings to the class. Who found the most different shapes?

3. Show overhead of Clue 12, Kearns Mansion South Elevation drawing. Explain: Building designers or “architects” use basic shapes as the building blocks for designing homes whether they are small and simple or large and complex, like the Kearns Mansion. Architects can create a complex building by combining different shapes or parts of different shapes. They can also create patterns by using the same shape over and over.

**Student Activity/Product**

Explain that students will be looking for basic shapes in the Kearns Mansion. Demonstrate student activity by placing a blank transparency over the Kearns Mansion South Elevation overhead. Show how to find shapes by outlining the triangle that makes up the main roof. Show students that even though the corners of the triangle are hidden behind the turrets, the basic shape of the roof is a triangle.

**Materials**

- Basic Shapes review sheet—make overhead
- Kearns Mansion South Elevation drawing—1 overhead for teacher—1 copy per student
- Building Blocks cut-outs—1-2 copies per student
- Blank transparencies—1 per student
- Different color crayons or non-permanent markers—4-5 per student
- Rulers, scissors, glue, paper—compasses optional
Hand out copy of Clue 12, *Kearns Mansion South Elevation* drawing, a blank transparency, and 4-5 different color crayons or non-permanent markers to each student. Tell students to choose a different color for each kind of shape (e.g. red for triangles, blue for circles, etc). Ask students to outline and identify as many shapes on the Kearns Mansion as they can and look for patterns. Emphasize that students should not just trace the building.

When students are finished, have them remove the drawing from behind their transparency. Ask the class: How many different shapes did you find? Which shape did you find most often? Did you notice any patterns?

Distribute one copy of Clue 13, *Building Blocks* cut outs to each student. (Students may want additional copies of this sheet.) Instruct students to create their own building using basic shapes. Students may cut up the picture of the mansion, the *Building Blocks*, and/or cut out their own shapes. They should create their building by gluing the basic shapes they have cut out on another piece of paper.

**Extensions**

- Using blocks or an architecture kit, have students create buildings with three-dimensional shapes.

**Links**

- Lesson 6: *South Temple Styles*  Pre-Tour
- Lesson 9: *Craftsmanship in the Kearns Mansion*  Post-Tour
Kearns Mansion South Elevation