Date



Ancient civilizations developed many beautiful patterns in tiles, artwork, decoration, and architecture. These patterns may be seen on boats and other transportation, in houses, and in public buildings.

You are the designer. Create a design that has at least one of each of these figures: parallelogram, trapezoid, kite, isosceles trapezoid, square, rectangle, rhombus.

- **1.** Draw quadrilaterals off of midsegments and diagonals of other quadrilaterals to make your design more symmetrical.
- 2. When you have completed your design, use a ruler and a protractor to measure all of the sides and angles to see how accurate you were in your drawing.
- **3.** With a group of your classmates, pass your designs around and practice identifying quadrilaterals in each design. Discuss how each quadrilateral's type could be proved.

Extension: Study which angles and structural shapes are known to be best for engineering.