

**Using the Whiteboard**

- Pull out the Remember tab and discuss the base and height with students.
- Tap the first **Action Arrow** to reveal information about area.

Teaching the Math

It is important that students develop the area formula themselves. Substituting numbers into a formula may teach computation, but it does not allow students to increase their conceptual knowledge of the way formulas are derived.

As the words *base* and *height* are introduced, explain that students may have seen these sides labeled as *length* and *width*. Instruct students to use the terms *base* and *height* because this will help them make the connection to other formulas that are derived from the formula of a rectangle.

Explain that the area of a figure must be measured in square units that are the same size and do not have gaps or overlap. Help students understand that a square unit is described by the space inside the closed unit. Show that area is a measure that incorporates two dimensions—length and width, or base and height.

Remind students that perpendicular lines and perpendicular line segments form right angles.

Ask: Can the base and height of a rectangle be parallel to each other? **No; they must be perpendicular to each other. Adjacent sides of a rectangle form right angles.**