Planning Notes

Get Ready

- Review how to label points on a graph.
- For the Linear Relationships box, model how to evaluate a relation using substitution.
- Review that $3x$ means $3 \times x$. Remind students to use the order of operations when evaluating relations.
- Use #4 to show students that they can substitute any variable for x. As a class, graph the relation on an overhead projector or interactive whiteboard so students can see that the points lie in a straight line regardless of the value chosen for x. Discuss which values are easier to calculate and graph.
- Review when points should be connected and when they should remain as points (continuous versus discrete). Use two examples to assess students' understanding. For example, when you graph a store's number of shoes versus shoe size, should you connect the points? When you graph distance versus time, do you connect the points? Then have students decide whether to connect the points in #4.
- Provide students with **BLM 6–1 Chapter 6 Problems of the Week** at the beginning of the chapter. Discuss solutions with the class as you progress through the chapter. Alternatively, you can use this blackline master as a review exercise at the end of the chapter. Have students try at least one question. Many of these problems require students to think creatively and try a variety of approaches. Students can take these problems home or work in class with other students when time permits.

Math Link

- Review how to substitute values into an equation and evaluate.
- Review how to round answers to the nearest tenth.
- Read the introduction aloud and discuss the table of values.
- Review the meaning of *linear relation*, *vertical*, *horizontal*, and *data*.
- Pair weaker students with stronger students for support, especially for #3 and #4.
- After completing the Math Link, ask students how the graph would change if the supertanker in the example was heavier. Discuss how the stopping speed would change over time.

Foldable

- The Foldable's shutter fold design provides students with the opportunity to write their own definitions for terms, fill in the blanks, and plot points on a graph.
- Ensure that students have sufficient time to complete the review section. Review the importance of labelling graphs before plotting points. Encourage students to use a coloured pencil to highlight terms such as *relation*, *table of values*, and *plot*. Although these are not key words, they are important terminology for the chapter.
- Section 6.1 asks students to identify patterns. In #1, they need to complete a table and a graph. Encourage students to write a linear equation that represents the pattern. This will help them complete #2, which does not have all the same approaches.
- Section 6.2 provides blanks for students to use to complete the definitions of *interpolate* and *extrapolate*. Remind students to label their graph before plotting the points.
- The practice grids at the bottom of the page allow students to plot points for three other linear equations and then answer questions orally relating to points between and beyond those shown. These could be used as a quiz.
- Section 6.3 allows students to apply the concepts they have learned in the chapter to problem solving. Review the importance of associating the variables used in the linear relation to similar representations in the problems. It is important to discuss whether the points should be connected or not.
- Have students identify specific areas they find difficult in the What I Need to Work On section.