

Planning Notes

Get Ready

- Review how to square a number and how to find a square root using a square.
- Review the formulas for area and perimeter/circumference.
- Use visuals of right prisms made from interlocking cubes to demonstrate that $\text{volume} = \text{area of the base} \times \text{height}$.
- Remind students that a prism has two identical bases which name the shape of the prism.
- Provide students with **BLM 3–1 Chapter 3 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

- Discuss what a mobile is, its purpose, why balance is so important for a mobile, and what things affect its balance. You may wish to show samples of mobiles to students.
- Review the difference between 2-D shapes and 3-D shapes.
- Discuss some of the formulas related to area, surface area, and volume. Provide students with **Master 25 Formulas**.
- Inform students that the Math Links throughout the chapter will help them create their own mobile at the end of the chapter in the Math Link: Wrap It Up!

Foldable

- The shutter door design for this Foldable provides the framework for a layered book containing proof of the exponent laws. Important terminology is defined on the front left shutter, and a review section is on the right. Encourage students to write definitions in their own words and include a unique example with their definition.
- Section 3.1 is the basic building block for exponents. It is important that students can write an exponential expression and show it as repeated multiplication.
- Section 3.2 is the first flap of the layered book in which all of the exponent laws are discovered and modelled. Encourage students to show the exponential operations in expanded form as well. Point out that each exponent law is dependent on the previous law and helps to simplify and solve more difficult and multi-step questions.
- Section 3.3 reviews the order of operations and introduces exponents and their laws so students can solve more complex equations.
- At the back of the Foldable, you may wish to review the meaning of *product*, *sum*, *quotient*, and *difference*.