

Instructor Intervention

- The **Introduction** to the lesson invites students to engage in a paper-folding activity. This activity will help students see that an understanding of exponents is fundamental to the study of bacteria and genetics. Have paper on hand for this activity.
- Although students can choose which law to explore in the **Tutorial** section, it is important that they have an opportunity to follow each of the three branches to ensure that all three exponent laws are covered.
- Some students may not be familiar with the m^n notation for $m \times n$ in the Power of a Power Law. Explain that they will encounter this notation in other places, but that they can always use a \times sign instead if they prefer.
- The different approaches used in the “Error Analysis” section of **Practice and Problems** reinforce the concept that there are often several correct ways to solve a problem.
- Mathematical reasoning skills are reinforced in the “Explaining the Steps” and “Working Backward” sections of **Practice and Problems**. Encourage students to explain their reasoning to one another.

Lesson Components

Examples

Product Law (1)
Power of a Product Law (2)
Power of a Power Law (1)
Conversions to Powers (2)
Combining Laws (1)

Practice and Problems

Laws with Integers
Explaining the Steps
Laws with Variables
Error Analysis
Working Backward

Extra Practice

Product Law
Power of a Product Law
Power of a Power Law
Combining Laws
Finding Values of n
Working Backward

Self-Check

Product Law (1)
Power of a Product Law (1)
Power of a Power Law (1)
Combining Laws (2)
Finding Values of n (1)
Working Backward (1)

Minimum score: 5 out of 7

Analyze the results by looking for a pattern. Drag the word that fits in the blank to describe the relationship.

The number of sections with each new fold.

doubles **triples** **quadruples**

Number of Folds	Number of Sections
1	2
2	4
3	8
4	16
5	32
6	64

Previous Next

Exponents
Laws of Exponents: Product Laws
Introduction

MENU
QUIT

1 2 3 4 5 6

