

Unit 4: Proportional Relationships and Percentages

Family Resources for Math 7 Unit 4: Proportional Relationships and Percentages

The Power of a Growth Mindset in Learning

A student's success is shaped not only by what they learn, but also by how they think about learning. A **growth mindset** is the belief that abilities can develop through effort, practice, and persistence. Students with this mindset view challenges as opportunities to grow, see mistakes as learning opportunities, and understand that improvement comes with time and effort.

When students believe their abilities are fixed, they may avoid challenges or become discouraged when learning is difficult. In contrast, a growth mindset encourages the belief:

“I may not understand this yet, but I can learn it.”

“I may not understand this yet, but I can learn it.”

Students with a Growth Mindset...

-  Embrace challenges
-  Learn from mistakes
-  Keep trying
-  Use different strategies
-  Build confidence through progress
-  Praising effort, not just results

Families Can Help By...

-  Normalizing challenges
-  Reflecting on mistakes
-  Encouraging problem-solving
-  Modeling lifelong learning
-  Celebrating persistence
-  Creating a supportive learning environment

A Lasting Foundation for Success

A growth mindset is more than a classroom idea—it is a life skill. When students believe they can grow and improve, they become more confident, independent, and willing to take on new challenges. This mindset supports not only academic success, but also perseverance and adaptability in all areas of life. By reinforcing these ideas at home and in school, we help students build a strong foundation: one where learning is seen as an ongoing journey, and every challenge is an opportunity to grow.

Brains Grow and Change



For additional information and resources to support at home, please visit the [Office of Mathematics website](#).

Big Ideas in Unit 4

Within this unit, students will learn these big ideas:

- Proportional Relationships with Fractions
- Percent Increase and Decrease
- Applying Percentages

For more details about this unit, see [Unit 4 Family Resources](#).

Lesson Specific Resources

Use the links below to learn about the learning from each lesson.

Lesson Link
4.1 Lots of Flags
4.2 Ratios and Rates with Fractions
4.3 Revisiting Proportional Relationships
4.4 More than That, Less than That
4.5 Say It with Decimals
4.6 Increasing and Decreasing
4.7 One Hundred Percent
4.8 Percent Increase and Decrease with Equations
4.9 Part of a Percent
4.10 Tax and Tip
4.11 Percentage Contexts
4.12 Solving Multi-step Percentage Problems
4.13 Measurement Error
4.14 Percent Error
4.15 Changes on the EarthLink's to an external site
4.16 Posing Percentage Problems