

## How to Use the Discovery Channel School Masters

The following Discover Math in Your World features provide real-world problem solving:

- **Student book feature** in each chapter reinforces math taught up to that point in the book and ties to contexts in the Discovery Channel School Video Library;
- **Discovery Channel School Video Library segment** for each chapter includes pre-viewing and post-viewing questions;
- **Discovery Channel School Master** for each chapter provides still more real-world problem solving.

After showing the video segment for each chapter, use the Discovery Channel School Master to provide problem-solving opportunities on the same topic or on a related topic to the one found in the video segment. The masters can also be used without viewing the video segment.

In each master, students will use data given in text, in illustrations or captions, or in tables or charts to solve the problems. A Writing in Math question on each master asks students to solve a problem, then explain their thinking. You can have students complete the Discovery Channel School Master in school or at home.

A teacher support page is provided for each Discovery Channel School Master. Information on how to introduce the master and key information to point out to students before they begin is discussed.

Other features provided on the teacher support page include an answer key, a follow-up activity, one or two cross-curricular activities which relate to another content area and link to a math activity or a math problem, and for some masters—another interesting data-rich problem using additional data on the same topic.

## Discovery Channel School Components

This chart provides information about the Discovery Channel School components and features provided with each chapter, and where these can be found.

Chapter	Lesson	Discovery Channel School Feature in Student Book	Discovery Channel School Video Segment	Discovery Channel School Master
<b>Chapter 1</b> Numbers, Expressions, and Equations	<b>Lesson 1-11</b> Mental Math Strategies, pp. 32–35	Beyond Bottles and Bags, p. 35	<b>Segment 1</b> Recycling	Recycling, pp. 1–2
<b>Chapter 2</b> Decimals	<b>Lesson 2-9</b> Dividing by a Decimal, pp. 100–103	Tilting Toward Toppling, p. 103	<b>Segment 2</b> The Leaning Tower of Pisa	The Leaning Tower of Pisa, pp. 3–4
<b>Chapter 3</b> Number Theory and Fraction Concepts	<b>Lesson 3-10</b> Connecting Fractions and Decimals, pp. 172–175	Drag Free, p. 175	<b>Segment 3</b> Mapping the Earth	Mapping the Earth, pp. 5–6
<b>Chapter 4</b> Adding and Subtracting Fractions	<b>Lesson 4-6</b> Subtracting Mixed Numbers, pp. 220–223	A Braking Event, p. 223	<b>Segment 4</b> Friction	Friction, pp. 7–8
<b>Chapter 5</b> Multiplying and Dividing Fractions	<b>Lesson 5-6</b> Dividing Fractions, pp. 266–269	Not-So-Sweet Honeybee, p. 269	<b>Segment 5</b> Deadly Insects	Deadly Insects, pp. 9–10
<b>Chapter 6</b> Ratio, Rates, and Proportion	<b>Lesson 6-3</b> Rates and Unit Rates, pp. 306–309	The Not-So-Mammoth Mastodon, p. 309	<b>Segment 6</b> Mammoths	Mammoths, pp. 11–12
<b>Chapter 7</b> Percent	<b>Lesson 7-8</b> Sales Tax and Discounts, pp. 380–383	A Whale of a Baby, p. 383	<b>Segment 7</b> Whales	Whales, pp. 13–14
<b>Chapter 8</b> Algebra: Integers and Rational Numbers	<b>Lesson 8-5</b> Adding Integers, pp. 418–421	Pressure Probes, p. 421	<b>Segment 8</b> Tornadoes	Tornadoes, pp. 15–16
<b>Chapter 9</b> Geometry	<b>Lesson 9-2</b> Measuring and Drawing Angles, pp. 476–479	The Siege Machine, p. 479	<b>Segment 9</b> Castles	Castles, pp. 17–18
<b>Chapter 10</b> Measurement	<b>Lesson 10-5</b> Elapsed Time, pp. 554–557	Bird Brain, p. 557	<b>Segment 10</b> Animal Magnetism	Animal Magnetism, pp. 19–20
<b>Chapter 11</b> Data, Graphs, and Probability	<b>Lesson 11-7</b> Circle Graphs, pp. 642–645	Mummies Age C-14, p. 645	<b>Segment 11</b> Mummies	Mummies, pp. 21–22
<b>Chapter 12</b> Algebra: Inequalities, Equations, and Graphs	<b>Lesson 12-7</b> Equations and Graphs, pp. 718–721	Heart Line, p. 721	<b>Segment 12</b> Track and Field	Track and Field, pp. 23–24