



SCHOLASTIC  
**MATH**<sup>®</sup>  
 Where Math Gets Real™

**TEACHER'S GUIDE**  
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 SUPPLEMENT TO SCHOLASTIC MATH



ISSUE DATES	9/1	9/15	10/6	10/27	11/17	12/8	1/12	2/2	3/2	3/23	4/13	5/4
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Registration is now required for access to your online resources.  
[www.scholastic.com/math](http://www.scholastic.com/math) YOUR ACCESS CODE: **numerator**

Dear Teacher,  
 Numbers take us exploring in this month's issue of *MATH*. Students can dive to the depths of the ocean with negative integers; chart the frequency of global volcanic eruptions on stem-and-leaf plots; and use rate reasoning to learn about futuristic vertical farming.  
 As always, you'll find an interactive digital issue, along with supplementary videos, skills sheets, and games, at [www.scholastic.com/math](http://www.scholastic.com/math). If you haven't already registered for access to these online resources, it's not too late! Go to [www.scholastic.com/math](http://www.scholastic.com/math) and enter this year's access code, **numerator**, to register.

Best wishes, The Editors  
[mathmag@scholastic.com](mailto:mathmag@scholastic.com)



**SKILLS GUIDE**

PAGE	SKILL & ARTICLE TITLE	COMMON CORE STATE STANDARDS	ONLINE RESOURCES <a href="http://www.scholastic.com/math">www.scholastic.com/math</a>
4	<b>Negative Integers</b> DEEP DIVERS	<b>The Number System:</b> Understand that positive and negative numbers are used together to describe quantities having opposite directions or values.	<ul style="list-style-type: none"> <li>Download a differentiated Common Core skills sheet, plus 5 More Questions.</li> <li>Learn more with Web Links.</li> </ul>
6	<b>Percents</b> MOVIE MAKEOVER	<b>Ratios &amp; Proportional Relationships:</b> Use proportional relationships to solve multistep ratio and percent problems.	<ul style="list-style-type: none"> <li>Download a differentiated Common Core skills sheet, plus 5 More Questions.</li> </ul>
8	<b>Data Analysis</b> FORECASTING ERUPTIONS	<b>Statistics &amp; Probability:</b> Develop a probability model by observing frequencies in data generated from a chance process.	<ul style="list-style-type: none"> <li>Download a differentiated Common Core skills sheet, plus 5 More Questions.</li> <li>Watch an instructional video and a background video.</li> </ul>
12	<b>Statistics</b> CLICK-TO-GIFT	<b>Statistics &amp; Probability:</b> Summarize numerical data sets in relation to their context.	<ul style="list-style-type: none"> <li>Learn more with Web Links.</li> <li>Read a related article.</li> </ul>
14	<b>Rate</b> GROWING UP	<b>Ratios &amp; Proportional Relationships:</b> Use ratio and rate reasoning to solve real-world and mathematical problems.	<ul style="list-style-type: none"> <li>Download a differentiated Common Core skills sheet, plus 5 More Questions.</li> <li>Watch a background video.</li> </ul>
16	<b>Equations</b> HOW PRIM OPERATES	<b>Expressions &amp; Equations:</b> Solve equations in the form $px + q = r$ and $p(x + q) = r$ , where $p$ , $q$ , and $r$ are specific rational numbers.	<ul style="list-style-type: none"> <li>Play a game.</li> </ul>

# ANSWERS

## PAGES 2-3

### NUMBERS IN THE NEWS

#### ONE BIG BUG

15 times longer

#### ROBOT STAR

$w \leq 120$

#### MATH GIVEAWAY

30,107,531 tickets

#### DO THE MATH!

2.9

## PAGE 4

### DEEP DIVERS

- 1,096 meters
- 379 meters
- 780 meters
- 1,796 meters
- 1,200 meters

## PAGE 6

### MOVIE MAKEOVER

- 16 inches
- 8%
- 5%
- \$16.00
- 8%
- 75%

## PAGE 8

### FORECASTING ERUPTIONS

1a.

STEM	LEAVES
0	
1	
2	
3	1 6 8 9
4	5

- Student estimates should range from 35 to 38.
- Data is mostly in the upper 30s.
- 37.8

2a.

LEAVES (1994-2003)	STEM	LEAVES (2004-2013)
	0	
	1	
7	2	8
9 8 6 6 4 3 2 1	3	0 1 4 5 5
5	4	4 6 8 9

- 36
- 35
- 2004-2013
- There are more data points in the higher stem values in this time frame.
- 1994-2003: 351; 2004-2013: 380
- Any data set in which you want to quickly see trends in mode and mean; for example, average daily temperature during one month.

## PAGE 12

### CLICK -TO-GIFT

- A
- C
- B
- D
- A
- B
- About \$400 million
- About \$850 million
- 2011
- Cyber Monday; it's likely the trend will continue upward at a steep slope.

## PAGE 14

### GROWING UP

- 1,215 square feet
- 213,694.2 pounds
- 24,393.6 pounds
- 4,823 pounds
- 17,424 pounds
- 3,963.5 square feet

## BACK PAGE

### HOW PRIM OPERATES

- 5 (upon)
- 21 (of)
- 2 (dozens)
- 4 (books)
- 18 (dozens)

*To find the answers online, click on "Teaching Resources."*

# ANSWERS

## TG PAGE 5

### SKILLS REVIEW

1. 1,396 meters
2. 192 meters
3. 75%
4. 64%
- 5.

STEM	LEAVES
0	4 5 5 7
1	1
2	

6. Student estimates should be between 5 and 7 based on mean, median, or mode calculations.
7. 164 square feet
8. The indoor farm
9.  $x = 3$
10.  $x = 33$

*To find the answers online, click on "Teaching Resources."*

## FREE PROGRAMS FOR TEACHERS @ SCHOLASTIC.COM/FREEBIECORNER

# GO ONLINE!

Don't miss out on the digital resources that come with your subscription at:

[www.scholastic.com/math](http://www.scholastic.com/math)

- **DOWNLOADABLE SKILLS SHEETS** provide more math problems.
- **INSTRUCTIONAL VIDEOS** teach step-by-step math lessons.
- **BACKGROUND VIDEOS** give real-world and cross-curricular tie-ins.
- **MATH GAMES**

The screenshot displays a digital magazine interface with several sections:

- SUBSCRIBERS:** A banner for digital issues with a "Click to read your digital issue" button. Below it are covers for "MATH: Where Math Gets Real" (featuring a "SHAPE UP!" article) and "ELECTRIC PETS".
- WATCH THIS!:** A section for instructional videos, including one on "Percent Increase" which shows a line graph.
- ONLINE MATH EXTRAS:** A section for additional resources, including "Background Videos" on U.S. wildfires, "Math Games" (Solving Variable Equations with Jared), and "Printable Skills Sheets" for scientific notation.
- NUMBERS IN THE NEWS:** A section for current events, featuring a video about the "Space Voyager" mission launched on September 6, 1977.
- NEWS QUESTION OF THE WEEK:** A "Space Voyager!" question about ratios and proportions.

\*If you're prompted to register online to access your materials, all you need is your access code: **numerator**

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