Shell Education
A Division of Teacher Created Materials

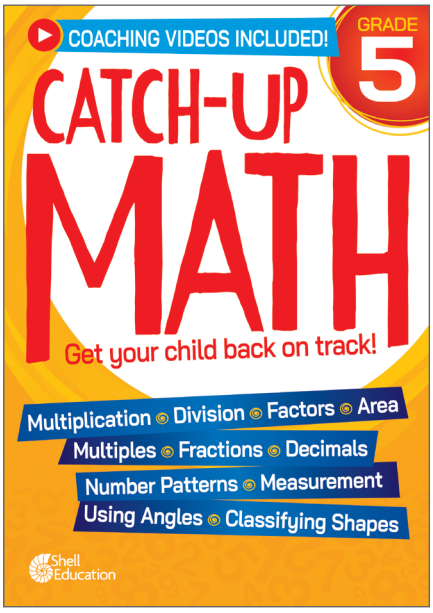
CATCH-UP MATH

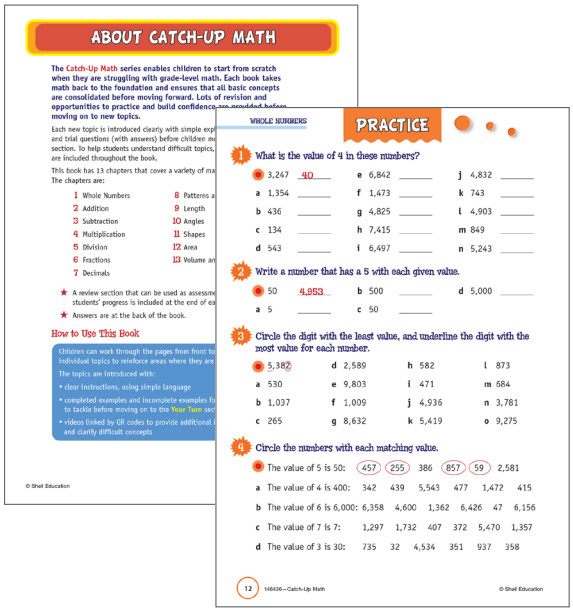
Get your child back on track!

Lessons and Activities

5th Grade

Table of Contents





COACHING VIDEOS INCLUDED!

GRADE 5

CATCH-UP MATH

Get your child back on track!

Multiplication ◎ Division ◎ Factors ◎ Area

Multiples ◎ Fractions ◎ Decimals

Number Patterns ◎ Measurement

Using Angles ◎ Classifying Shapes

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ABOUT CATCH-UP MATH

The Catch-Up Math series enables children to start from scratch when they are struggling with grade-level math. Each book takes math back to the foundation and ensures that all basic concepts are consolidated before moving forward. Lots of revision and opportunities to practice and build confidence are provided before moving on to new topics.

Each new topic is introduced clearly with simple explanations, examples, and trial questions (with answers) before children move to the Practice section. To help students understand difficult topics, instructional videos are included throughout the book.

This book has 13 chapters that cover a variety of mathematical concepts. The chapters are:

A QR code on a topic page provides access to the video.

- ★ A review section that can be used as assessment and to check students' progress is included at the end of each chapter.
- ★ Answers are at the back of the book.

How to Use This Book

Children can work through the pages from front to back or choose individual topics to reinforce areas where they are struggling.

The topics are introduced with:

- clear instructions, using simple language
- completed examples and incomplete examples for students to tackle before moving on to the **Your Turn** sections
- videos linked by QR codes to provide additional instruction and clarify difficult concepts

Each Your Turn section contains a SELF CHECK for students to reflect and give self-assessment on their understanding.

HOW TO USE THE QR CODES IN CATCH-UP MATH

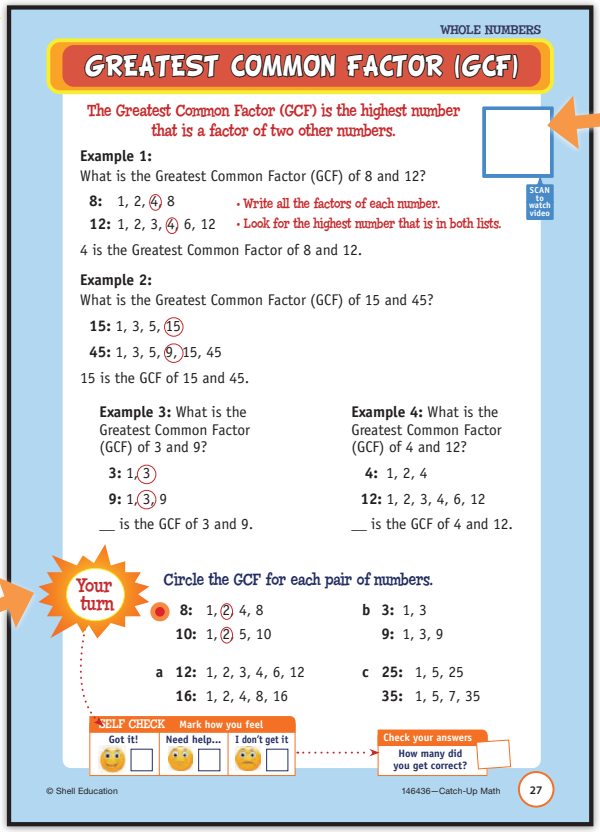
A unique aspect of the **Catch-Up Math** series is the **instructional videos**.

The videos further explain and clarify various mathematical concepts. The videos are simply accessed via QR codes and can be watched on a phone o or tablet. Or, view all the videos by following a link.

Access the video by scanning the QR code with your device

Each video shows the page from the book. An instructor talks through the concepts and examples and demonstrates what children need to do. The solutions to the examples are presented before children tackle the **Your Turn** sections. This careful instruction ensures that children can confidently move on to the following Practice questions. Children should be encouraged to check their **Your Turn** answers before moving on.

25 instructional videos included!



Scan to access the video.

After watching the video, children can confidently complete the **Your Turn** section.

PLACE VALUE
THREE-DIGIT AND FOUR-DIGIT NUMBERS

Where a digit is in a number is called the place value.

A three-digit number has a hundreds place, a tens place, and a ones place.

Example 1:

H T O
7 2 6

The place value of the 7 is hundreds.

The place value of the 2 is tens.

The place value of the 6 is ones.

Example 2:

H T O
3 0 8

The place value of the 3 is _____.

The place value of the 8 is _____.

The place value of the __ is tens.

A four-digit number has a thousands place, a hundreds place, a tens place, and a ones place.

Example 3:

Th H T O
3,854

The place value of the 3 is thousands.

The place value of the 8 is hundreds.

The place value of the 5 is tens.

The place value of the 4 is ones.

Example 4:

Th H T O
8,614

The place value of the 8 is _____.

The place value of the 6 is _____.

The place value of the 1 is _____.

The place value of the __ is ones.

Your turn

1 What is the place value of the 5?

●	523	hundreds	c	152	_____
a	3,275	_____	d	2,053	_____
b	5,961	_____	e	1,295	_____

2 Circle the thousands in purple, hundreds in green, tens in blue, and ones in red.

● 2,897 a 5,921 b 253 c 320 d 4,815

SELF CHECK Mark how you feel

Got it!	Need help...	I don't get it
☐	☐	☐

Check your answers

How many did you get correct? ☐

PRACTICE

1 Write the place value of each underlined digit.

- 3,7<u>2</u>4 — tens
- a 5,2<u>3</u>6 _____
- b 7,3<u>1</u>4 _____
- c 25<u>7</u> _____
- d 1,2<u>9</u>3 _____
- e 1,0<u>3</u>6 _____
- f 5,1<u>3</u>0 _____
- g 1<u>0</u>8 _____
- h 64<u>2</u> _____
- i 7,<u>3</u>98 _____
- j 2,4<u>5</u>0 _____
- k 3,<u>7</u>06 _____
- l <u>5</u>2 _____
- m 3,25<u>4</u> _____

2 Write the numbers in standard form.

- 6 thousands, 2 tens, 3 hundreds, 0 ones — 6,320
- a 5 tens, 8 ones, 3 thousands, 4 hundreds _____
- b 9 hundreds, 0 tens, 0 ones _____
- c 6 ones, 5 tens, 7 hundreds _____
- d 1 thousands, 4 ones, 8 hundreds, 3 tens _____
- e 2 hundreds, 3 tens, 5 ones _____

3 Color the digits in the thousands purple, hundreds green, tens blue, and ones red.

- 6 1 5 3
- a 8 4 3 5
- b 4 7 5 6
- c 6 6 5
- d 7 5 6
- e 8 3 7
- f 4 5 8 7
- g 9 2 6
- h 8 1 7 0
- i 6 1 0 9
- j 2 1 9
- k 2 0 1 3
- l 3 2 4
- m 5 9 6
- n 4 9 2 3

VALUE

THREE-DIGIT AND FOUR-DIGIT NUMBERS

The value of a number is how much a number is worth.
To find the value of a digit, look at where it is in a number.

For example, what is the value of the 3 in 7,310?
The 3 is in the hundreds column, so the value of 3 is 300.

Example 1:

In the number 593,
the value of 5 is 500,
the value of 9 is 90,
and the value of 3 is 3.

Example 2:

In the number 1,729,
the value of 1 is 1,000,
the value of 7 is 700,
the value of 2 is 20,
and the value of 9 is 9.

Example 3:

In the number 471,
the value of 4 is _____,
the value of _____ is 70,
and the value of 1 is _____.

Example 4:

In the number 8,235,
the value of 8 is _____,
the value of 2 is _____,
the value of _____ is 30
and the value of 5 is _____.

Your turn

Circle the numbers where the value of 3 is 30.

537 634 3,921 8,231

1,325 1,813 432 13

SELF CHECK Mark how you feel

Got it!	Need help...	I don't get it
☐	☐	☐

Check your answers

How many did you get correct? ☐

PRACTICE

1 What is the value of 4 in these numbers?

● 3,247	40	e 6,842	_____	j 4,832	_____
a 1,354	_____	f 1,473	_____	k 743	_____
b 436	_____	g 4,825	_____	l 4,903	_____
c 134	_____	h 7,415	_____	m 849	_____
d 543	_____	i 6,497	_____	n 5,243	_____

2 Write a number that has a 5 with each given value.

● 50	4,953	b 500	_____	d 5,000	_____
a 5	_____	c 50	_____		

3 Circle the digit with the least value, and underline the digit with the most value for each number.

● 5,382	d 2,589	h 582	l 873
a 530	e 9,803	i 471	m 684
b 1,037	f 1,009	j 4,936	n 3,781
c 265	g 8,632	k 5,419	o 9,275

4 Circle the numbers with each matching value.

●	The value of 5 is 50:	(457)	(255)	386	(857)	(59)	2,581
a	The value of 4 is 400:	342	439	5,543	477	1,472	415
b	The value of 6 is 6,000:	6,358	4,600	1,362	6,426	47	6,156
c	The value of 7 is 7:	1,297	1,732	407	372	5,470	1,357
d	The value of 3 is 30:	735	32	4,534	351	937	358

EXPANDED FORM
THREE-DIGIT AND FOUR-DIGIT NUMBERS

We expand a number by writing the value of each digit.

Example 1: Write 763 in expanded form.

763 = 700 + 60 + 3

(7 hundreds) (6 tens) (3 ones)

When a number is written this way, it is in expanded form.

Example 2: Write 2,852 in expanded form.

2,852 = 2,000 + 800 + 50 + 2

(2 thousands) (8 hundreds) (5 tens) (2 ones)

When a number has a zero in it, leave out that place value.

Example 3:

3,092 = 3,000 + 90 + 2

(3 thousands) (9 tens) (2 ones)

Leave out the hundreds.

Example 4:

Complete the expanded form.

8,243 = 8,000 + ____ + 40 + ____

(8 _____) (2 hundreds) (____ tens) (3 ones)

Your turn

Write these numbers in expanded form.

● 347 = 300 + 40 + 7

= 3 hundreds + 4 tens + 7 ones

a 432 = ____ + ____ + ____

= ____ hundreds + ____ tens + ____ ones

b 3,065 = ____ + ____ + ____

= ____ thousands + ____ tens + ____ ones

SELF CHECK Mark how you feel

Got it!	Need help...	I don't get it
☐	☐	☐

Check your answers

How many did you get correct? ☐

PRACTICE

1 Write these numbers in expanded form.

● 2,538 = 2,000 + 500 + 30 + 8

a 857 = _____ + _____ + _____

b 329 = _____ + _____ + _____

c 1,093 = _____ + _____ + _____

d 1,834 = _____ + _____ + _____ + _____

e 506 = _____ + _____

f 4,370 = _____ + _____ + _____

2 Write these numbers in expanded form.

● 1,464 = 1,000 + 400 + 60 + 4

a 302 = _____

b 1,642 = _____

c 2,037 = _____

d 4,060 = _____

e 850 = _____

3 Match each number with its expanded form.

●	282	6,000 + 800 + 9
a	1,463	200 + 80 + 2
b	707	400 + 20 + 4
c	1,490	1,000 + 400 + 60 + 3
d	540	1,000 + 400 + 90
e	6,809	500 + 40
f	424	700 + 7