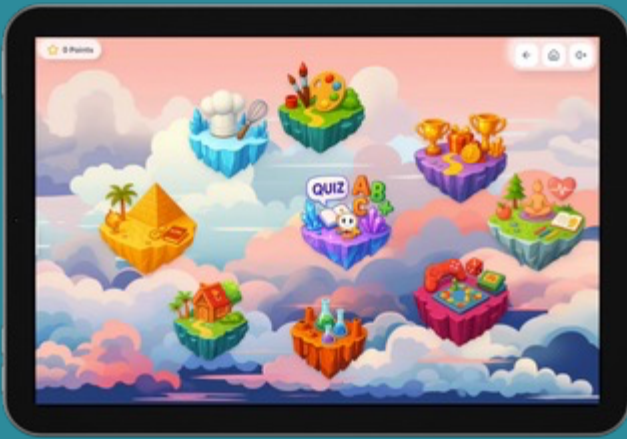


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Numbers to 10 000 - Year 4

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PLACE VALUE HOUSES

Each place is 10 times the place to its right.



$$47\,306 = 40\,000 + 7\,000 + 300 + 6$$

forty-seven thousand, three hundred and six

ZERO HOLDS THE PLACE

A zero shows that no units are in that place. It keeps every other digit in the correct position.

TEN THOUSANDS	THOUSANDS	HUNDREDS	TENS	ONES
5	0	2	0	4

$$50\ 204 = 50\ 000 + 200 + 4$$

seventy thousand and thirty = 70 030

Read every place before you write.

COMPARE AND ORDER NUMBERS

1. START LEFT

Compare the ten-thousands digits first.

2. FIND THE FIRST UNEQUAL PLACE

The number with the greater digit there is greater.

3. KEEP CHECKING

If the digits match, move one place to the right.

$$38\,642 > 38\,426$$

Ten-thousands	Thousands	Hundreds	Tens	Ones
3	8	6	4	2
3	8	4	2	6

6 hundreds is greater than 4 hundreds.

ASCENDING ORDER — smallest to greatest:

12 305, 12 350, 15 203, 15 230

DESCENDING ORDER — greatest to smallest:

47 091, 47 019, 40 791, 40 719

SYMBOL KEY: $<$ less than

$>$ greater than

$=$ equal to



NUMBER OF THE DAY



OUR NUMBER:

WORD FORM

EXPANDED NOTATION

ODD OR EVEN?

☐

ODD

☐

EVEN

PLACE VALUE CHART

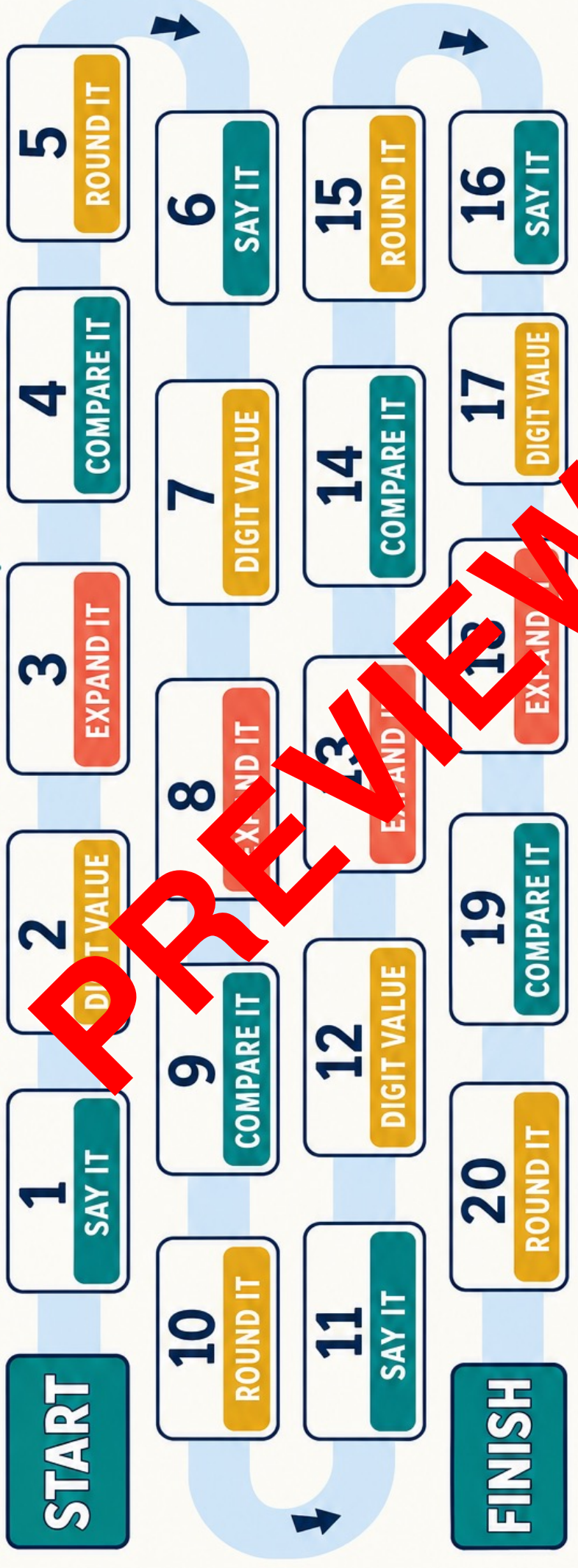
TEN THOUSANDS	THOUSANDS	HUNDREDS	TENS	ONES

MORE AND LESS

1 LESS		1 MORE	
10 LESS		10 MORE	
100 LESS		100 MORE	
1 000 LESS		1 000 MORE	

PLACE VALUE TRAIL

Build it. Read it. Explain it.



HOW TO PLAY

- 1 Each player draws five digit cards and builds a five-digit number.
- 2 Record your number on the Place Value Trail Recording Mat.
- 3 Roll a die, move, then complete the challenge on your space.
- 4 Your partner checks your answer. First to **FINISH** wins.

CHALLENGE KEY

- SAY IT** — Read your number aloud.
- DIGIT VALUE** — State the value of one digit chosen by your partner.
- EXPAND IT** — Write your number in expanded notation.
- COMPARE IT** — Compare your number with your partner's number.
- ROUND IT** — Round your number to the nearest 10, 100 or 1 000, chosen by your partner.

PLACE VALUE TRAIL DIGIT CARDS

Cut apart the cards. Shuffle, then draw five cards to build a five-digit number.





PLACE VALUE TRAIL RECORDING MAT



Build a five-digit number, then record it in three forms.

ROUND 1

BUILT NUMBER:

TEN THOUSANDS	THOUSANDS	HUNDREDS	TENS	ONES

NUMERAL: _____

WORD FORM: _____

EXPANDED NOTATION: _____

ROUND 2

BUILT NUMBER:

TEN THOUSANDS	THOUSANDS	HUNDREDS	TENS	ONES

NUMERAL: _____

WORD FORM: _____

EXPANDED NOTATION: _____

ROUND 3

BUILT NUMBER:

TEN THOUSANDS	THOUSANDS	HUNDREDS	TENS	ONES

NUMERAL: _____

WORD FORM: _____

EXPANDED NOTATION: _____

ROUND 4

BUILT NUMBER:

TEN THOUSANDS	THOUSANDS	HUNDREDS	TENS	ONES

NUMERAL: _____

WORD FORM: _____

EXPANDED NOTATION: _____

NUMBER-WORD MEMORY MATCH

NUMERAL CARDS

Cut apart both card sheets. Place all cards face down, then find matching numeral and word-form pairs.

14 206



32 480



50 073



61 905



27 340



43 018



75 600



89 274



PREVIEW

NUMBER-WORD MEMORY MATCH

WORD-FORM CARDS

Match each word form to its numeral.



fourteen thousand,
two hundred
and six



thirty-two thousand,
four hundred
and eighty



fifty thousand
and seventy-three



sixty-one thousand,
nine hundred
and five



twenty-seven thousand,
three hundred
and forty



forty-three thousand
and eighteen



seventy-five thousand,
six hundred



eighty-nine thousand,
two hundred
and seventy-four



PREVIEW

PARTITIONING BINGO

BOARDS A AND B

Caller reads a number. Cover the matching partition. Three in a row wins.

BOARD A		
$30\,000 + 4\,000$ $+ 500 + 60 + 2$	$40\,000 + 2\,000$ $+ 700 + 18$	$50\,000 + 400$ $+ 6$
$60\,000 + 1\,000$ $+ 250$	$70\,000 + 3\,000$ $+ 84$	$20\,000 + 8\,000$ $+ 900 + 5$
$40\,000 + 6\,000$ $+ 370$	$10\,000 + 9\,000$ $+ 600 + 40$	$80\,000 + 5\,000$ $+ 100 + 29$

BOARD B		
$30\,000 + 2\,000$ $+ 500 + 40$	$40\,000 + 7\,000$ $+ 200 + 6$	$50\,000 + 8\,000$ $+ 91$
$60\,000 + 4\,000$ $+ 780$	$70\,000 + 1\,000$ $+ 300 + 5$	$20\,000 + 6\,000$ $+ 400 + 38$
$30\,000 + 9\,000$ $+ 520$	$80\,000 + 2\,000$ $+ 600 + 4$	$90\,000 + 5\,000$ $+ 17$

PARTITIONING BINGO

BOARDS C AND D + CALLER STRIP

BOARD C

$30\,000 + 4\,000 + 500 + 60 + 2$	$40\,000 + 7\,000 + 200 + 6$	$50\,000 + 3\,000 + 900 + 100 + 1$
$60\,000 + 1\,000 + 250$	$70\,000 + 3\,000 + 84$	$20\,000 + 5\,000 + 400 + 38$
$30\,000 + 9\,000 + 520$	$80\,000 + 2\,000 + 600 + 4$	$90\,000 + 5\,000 + 17$

BOARD D

$30\,000 + 2\,000 + 500 + 40$	$40\,000 + 2\,000 + 700 + 18$	$50\,000 + 400 + 6$
$60\,000 + 4\,000 + 780$	$70\,000 + 1\,000 + 300 + 5$	$20\,000 + 8\,000 + 900 + 5$
$40\,000 + 6\,000 + 300$	$10\,000 + 9\,000 + 600 + 40$	$80\,000 + 5\,000 + 100 + 29$

CALLER NUMBERS – CUT-OUT

34 562	42 718	50 406	61 250	73 084	28 905	46 370	19 640	85 129
32 540	47 206	58 091	64 780	71 305	26 438	39 520	82 604	95 017

WORKSHEET 1A

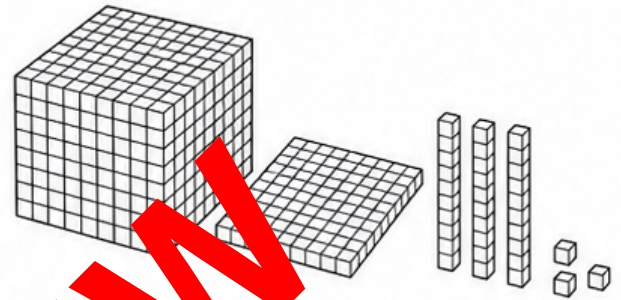
PLACE VALUE FOUNDATIONS

NAME: _____

DATE: _____

1. WHAT IS THE VALUE OF THE DIGIT?

NUMBER	DIGIT	VALUE
47 306	7	_____
63 481	4	_____
50 294	5	_____
28 650	6	_____



2. COMPLETE THE PLACE VALUE CHART FOR 14 035

TEN THOUSANDS	THOUSANDS	HUNDREDS	TENS	ONES
_____	_____	_____	_____	_____

3. NAME EACH DIGIT IN 4918

Ten thousands: _____

Thousands: _____

Hundreds: _____

Tens: _____

Ones: _____

4. ZERO HAS A JOB.

What is the value of the 0 in 40 572? _____

Explain what place it holds. _____

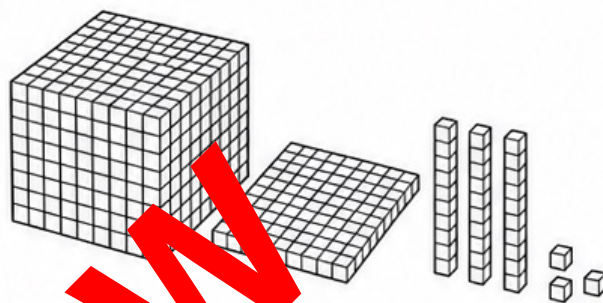
PLACE VALUE FOUNDATIONS

NAME: _____

DATE: _____

1. WHAT IS THE VALUE OF THE DIGIT?

NUMBER	DIGIT	VALUE
47 306	7	7 000
63 481	4	400
50 294	5	50 000
28 650	6	600



2. COMPLETE THE PLACE VALUE CHART FOR 72 405

TEN THOUSANDS	THOUSANDS	HUNDREDS	TENS	ONES
7	2	4	0	5

3. NAME EACH DIGIT IN 918

Ten thousands: _____

Thousands: 6Hundreds: 9Tens: 1Ones: 8

4. ZERO HAS A JOB.

What is the value of the 0 in 40 572? 0Explain what place it holds. It holds the thousands place.

WORKSHEET 1B

COMPOSE AND DECOMPOSE

NAME: _____

DATE: _____

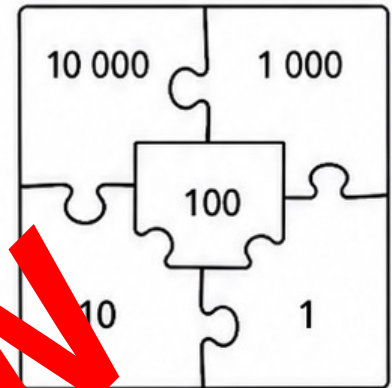
1. BUILD EACH NUMERAL.

a. $30\,000 + 7\,000 + 400 + 20 + 6 =$ _____

b. $50\,000 + 900 + 8 =$ _____

c. $60\,000 + 2\,000 + 70 + 3 =$ _____

d. $80\,000 + 4\,000 + 600 + 10 =$ _____



2. WRITE EACH NUMBER IN EXPANDED NOTATION.

a. $45\,307 =$ _____

b. $70\,842 =$ _____

c. $29\,060 =$ _____

d. $63\,915 =$ _____

3. COMPLETE THE MISSING PART.

a. $58\,241 = 50\,000 + 8\,000 + 200 + \underline{\hspace{2cm}} + 1$

b. $40\,709 = 40\,000 + 700 + \underline{\hspace{2cm}}$

c. $76\,030 = 70\,000 + 6\,000 + \underline{\hspace{2cm}}$

d. $31\,684 = 30\,000 + \underline{\hspace{2cm}} + 600 + 80 + 4$

4. SHOW IT TWO WAYS.

Use 9 ten-thousands, 1 thousand, 2 hundreds, 0 tens and 5 ones.

Standard notation: _____

Expanded notation: _____

COMPOSE AND DECOMPOSE

NAME: _____

DATE: _____

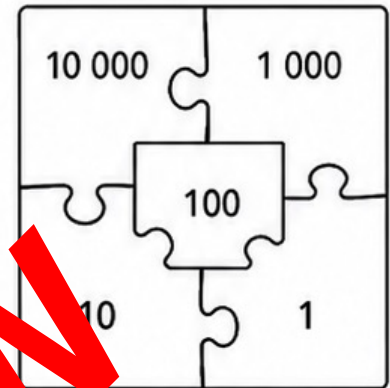
1. BUILD EACH NUMERAL.

a. $30\ 000 + 7\ 000 + 400 + 20 + 6 =$ 37 426

b. $50\ 000 + 900 + 8 =$ 50 908

c. $60\ 000 + 2\ 000 + 70 + 3 =$ 62 073

d. $80\ 000 + 4\ 000 + 600 + 10 =$ 84 610



2. WRITE EACH NUMBER IN EXPANDED NOTATION.

a. $45\ 307 =$ $40\ 000 + 5\ 000 + 300 + 7$

b. $70\ 842 =$ $70\ 000 + 800 + 40 + 2$

c. $29\ 060 =$ $20\ 000 + 9\ 000 + 60$

d. $63\ 915 =$ $60\ 000 + 3\ 000 + 900 + 10 + 5$

3. COMPLETE THE MISSING PART.

a. $58\ 241 = 50\ 000 + 8\ 000 + 200 +$ 40 $+ 1$

b. $40\ 709 = 40\ 000 + 700 +$ 9

c. $76\ 030 = 70\ 000 + 6\ 000 +$ 30

d. $31\ 684 = 30\ 000 +$ 1 000 $+ 600 + 80 + 4$

4. SHOW IT TWO WAYS.

Use 9 ten-thousands, 1 thousand, 2 hundreds, 0 tens and 5 ones.

Standard notation: 91 205Expanded notation: $90\ 000 + 1\ 000 + 200 + 5$

READ AND WRITE NUMBERS



NAME: _____

DATE: _____

1. WRITE EACH NUMERAL IN WORDS.

a. 18 246

b. 40 508

c. 72 030

d. 95 604

2. WRITE EACH NUMBER AS A NUMERAL.

a. thirty-three thousand, eight hundred and nineteen = _____

b. fifty-six thousand and seven = _____

c. sixty thousand, four hundred and seventy = _____

d. eighty-one thousand, two hundred and five = _____

Remember: a zero can hold a place even when we do not say its name.

READ AND WRITE NUMBERS



What
number
is this?

1 2 3

NAME: _____

DATE: _____

1. WRITE EACH NUMERAL IN WORDS.

a. 18 246

eighteen thousand, two hundred and forty-six

b. 40 508

forty thousand, five hundred and eight

c. 72 030

seventy-two thousand and thirty

d. 95 604

ninety-five thousand, six hundred and four

2. WRITE EACH NUMBER AS A NUMERAL.

a. thirty-three thousand, eight hundred and nineteen = 33 819

b. fifty-six thousand and seven = 56 007

c. sixty thousand, four hundred and seventy = 60 470

d. eighty-one thousand, two hundred and five = 81 205

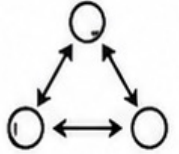
Remember: a zero can hold a place even when we do not say its name.

WORKSHEET 2B

THREE WAYS TO SHOW A NUMBER

NAME: _____

DATE: _____



Complete the missing form in each panel.

A

NUMERAL: 24 618

WORD FORM:

EXPANDED NOTATION:

$20\ 000 + 4\ 000 + 600 + 10 + 8$

B

NUMERAL: _____

WORD FORM:

fifty thousand three hundred and two

EXPANDED NOTATION:

$50\ 000 + 300 + 2$

C

NUMERAL: 63 070

WORD FORM:

sixty-three thousand and seventy

EXPANDED NOTATION:

D

NUMERAL: _____

WORD FORM:

ninety-one thousand, four hundred and six

EXPANDED NOTATION:

$90\ 000 + 1\ 000 + 400 + 6$

E

NUMERAL: 40 905

WORD FORM:

EXPANDED NOTATION:

$40\ 000 + 900 + 5$

F

NUMERAL: 78 241

WORD FORM:

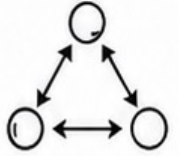
seventy-eight thousand, two hundred and forty-one

EXPANDED NOTATION:

THREE WAYS TO SHOW A NUMBER

NAME: _____

DATE: _____



Complete the missing form in each panel.

A

NUMERAL: 24 618

WORD FORM:

twenty-four thousand, six hundred and eighteen

EXPANDED NOTATION:

 $20\ 000 + 4\ 000 + 600 + 10 + 8$ **B**NUMERAL: **50 302**

WORD FORM:

fifty thousand, three hundred and two

EXPANDED NOTATION:

 $50\ 000 + 300 + 2$ **C**

NUMERAL: 63 070

WORD FORM:

sixty-three thousand and seventy

EXPANDED NOTATION:

 $60\ 000 + 3\ 000 + 70$ **D**NUMERAL: **91 406**

WORD FORM:

ninety-one thousand, four hundred and six

EXPANDED NOTATION:

 $90\ 000 + 1\ 000 + 400 + 6$ **E**

NUMERAL: 40 905

WORD FORM:

forty thousand, nine hundred and five

EXPANDED NOTATION:

 $40\ 000 + 900 + 5$ **F**

NUMERAL: 78 241

WORD FORM:

seventy-eight thousand, two hundred and forty-one

EXPANDED NOTATION:

 $70\ 000 + 8\ 000 + 200 + 40 + 1$

WORKSHEET 3

ZERO DETECTIVES



NAME: _____

DATE: _____

1. WRITE EACH NUMERAL IN WORDS.

a. 40 062

b. 70 405

c. 90 030

2. WHICH PLACE DOES THE 0 HOLD?

NUMBER	PLACE HELD BY 0
52 804	_____
30 719	_____
84 500	_____
70 300	_____

3. FIX THE ZERO ERROR.

Maya writes “fifty-two thousand and nine” as 52 900.

What went wrong?

Correct numeral: _____

4. WRITE EACH NUMBER AS A NUMERAL.

a. sixty thousand, five hundred and four = _____

b. eighty-three thousand and twenty = _____

ZERO DETECTIVES



NAME: _____

DATE: _____

1. WRITE EACH NUMERAL IN WORDS.

a. 40 062

forty thousand and sixty-two

b. 70 405

seventy thousand, four hundred and five

c. 90 030

ninety thousand and thirty

2. WHICH PLACE DOES THE 0 HOLD?

NUMBER	PLACE HELD BY 0
52 804	tens
30 719	thousands
84 506	tens
70 352	thousands

3. FIX THE ZERO ERROR.

Maya writes "fifty-two thousand and nine" as 52 900.

What went wrong?

The 9 is in the hundreds place. It belongs in the ones place.

Correct numeral: **52 009**

4. WRITE EACH NUMBER AS A NUMERAL.

a. sixty thousand, five hundred and four = **60 504**

b. eighty-three thousand and twenty = **83 020**

WORKSHEET 4

COMPARE AND ORDER

NAME: _____

DATE: _____

1. WRITE $<$, $>$ OR $=$.

a. 34 620 34 602

d. 19 876 20 001

b. 50 090 50 900

e. 83 070 83 007

c. 72 405 72 405

f. 46 500 46 050

2. ORDER FROM SMALLEST TO GREATEST.

a. 23 410, 23 104, 21 430, 24 301, 20 011

Answer: _____

b. 50 205, 50 025, 52 005, 50 250, 52 000

Answer: _____

3. ORDER FROM GREATEST TO SMALLEST.

a. 78 012, 72 812, 78 210, 72 810, 70 281

Answer: _____

b. 41 950, 49 105, 45 910, 49 150, 40 915

Answer: _____



4. EXPLAIN THE FIRST UNEQUAL PLACE.

Compare 65 482 and 65 782.

Greater number: _____

Which place decided the comparison? _____

Explain:

WORKSHEET 4 **ANSWERS**

COMPARE AND ORDER

NAME: _____

DATE: _____

1. WRITE $<$, $>$ OR $=$.

a. 34 620 $>$ 34 602

d. 19 876 $<$ 20 001

b. 50 090 $<$ 50 900

e. 83 070 $>$ 83 007

c. 72 405 $=$ 72 405

f. 46 500 $>$ 46 050

2. ORDER FROM SMALLEST TO GREATEST.

a. 23 410, 23 104, 21 430, 24 301, 20 341

Answer: 20 341, 21 430, 23 104, 23 410, 24 301

b. 50 205, 50 025, 52 005, 50 250, 52 050

Answer: 50 025, 50 205, 50 250, 52 005, 52 050

3. ORDER FROM GREATEST TO SMALLEST.

a. 78 012, 70 812, 72 810, 70 281

Answer: 78 210, 78 012, 72 810, 70 812, 70 281

b. 41 950, 49 105, 45 910, 49 150, 40 915

Answer: 49 150, 49 105, 45 910, 41 950, 40 915

4. EXPLAIN THE FIRST UNEQUAL PLACE.

Compare 65 482 and 65 782.

Greater number: 65 782

Which place decided the comparison? hundreds

Explain: The first two digits match. 7 hundreds is greater than 4 hundreds.

WORKSHEET 5

NUMBER BUILDER CHALLENGE

NAME: _____

DATE: _____

Use each digit exactly once. The first digit cannot be 0.

CHALLENGE 1

2

0

7

5

4

GREATEST NUMBER

Numeral: _____

Word form: _____

Expanded notation: _____

SMALLEST NUMBER

Numeral: _____

Word form: _____

Expanded notation: _____

Comparison: Greatest number ☐ Smallest number

CHALLENGE 2

9

1

0

6

3

GREATEST NUMBER

Numeral: _____

Word form: _____

Expanded notation: _____

SMALLEST NUMBER

Numeral: _____

Word form: _____

Expanded notation: _____

Comparison: Greatest number ☐ Smallest number

THINK DEEPLY: Why can 0 not be the first digit in a five-digit number?

NUMBER BUILDER CHALLENGE

NAME: _____

DATE: _____

Use each digit exactly once. The first digit cannot be 0.

CHALLENGE 1

2

0

7

5

4

GREATEST NUMBER

Numeral: 75 420Word form: seventy-five thousand, four hundred and twentyExpanded notation: 70 000 + 5 000 + 400 + 20

SMALLEST NUMBER

Numeral: 20 457Word form: twenty thousand, four hundred and fifty-sevenExpanded notation: 20 000 + 400 + 50 + 7Comparison: Greatest number Smallest number

CHALLENGE 2

9

1

0

6

3

GREATEST NUMBER

Numeral: 96 310Word form: ninety-six thousand, three hundred and tenExpanded notation: 90 000 + 6 000 + 300 + 10

SMALLEST NUMBER

Numeral: 10 369Word form: ten thousand, three hundred and sixty-nineExpanded notation: 10 000 + 300 + 60 + 9Comparison: Greatest number Smallest number

THINK DEEPLY: Why can 0 not be the first digit in a five-digit number?

A leading 0 has no place value, so the numeral would have only four digits.

ASSESSMENT

NUMBERS TO 10 000 – PAGE A



NAME: _____

DATE: _____

SCORE: _____ / 20

1. PLACE VALUE

(4 marks)

- a. What is the value of the 7 in 47 306? _____ (1)
- b. Which digit is in the hundreds place in 62 918? _____ (1)
- c. Which place does the 5 hold in 35 042? _____ (1)
- d. What is the value of the 0 in 80 214? _____ (1)

2. SHOW NUMBERS IN DIFFERENT FORMS

(8 marks)

- a. Write 53 208 in words. (2)

- b. Write “seventy-one thousand and four six” as a numeral. _____ (2)
- c. Write 46 305 in expanded notation. (2)

- d. Write $60\,000 + 4\,000 + 800 + 20 + 9$ as a numeral. _____ (2)

3. COMPARE

(4 marks)

Write $<$, $>$ or $=$.

- a. 38 420 38 402 (1)
- b. 50 090 49 999 (1)
- c. 72 305 72 350 (1)
- d. 64 008 64 008 (1)

4. ORDER

(4 marks)

Order from smallest to greatest.

45 210, 40 521, 45 120, 41 502

Answer: _____

ASSESSMENT ANSWERS

NUMBERS TO 10 000 – PAGE A



NAME: _____

DATE: _____

SCORE: _____ / 20

1. PLACE VALUE

(4 marks)

- a. What is the value of the 7 in 47 306? 7 000 (1)
- b. Which digit is in the hundreds place in 62 918? 9 (1)
- c. Which place does the 5 hold in 35 042? thousands (1)
- d. What is the value of the 0 in 80 214? 0 (1)

2. SHOW NUMBERS IN DIFFERENT FORMS

(8 marks)

- a. Write 53 208 in words. (2)
fifty-three thousand, two hundred and eight
- b. Write “seventy-one thousand and four six” as a numeral. 71 046 (2)
- c. Write 46 305 in expanded notation. (2)
40 000 + 6 000 + 300 + 5
- d. Write $60\,000 + 4\,000 + 800 + 20 + 9$ as a numeral. 64 829 (2)

3. COMPARE

(4 marks)

Write $<$, $>$ or $=$.

- a. 38 420 $>$ 38 402 (1)
- b. 50 090 $>$ 49 999 (1)
- c. 72 305 $<$ 72 350 (1)
- d. 64 008 $=$ 64 008 (1)

4. ORDER

(4 marks)

Order from smallest to greatest.

45 210, 40 521, 45 120, 41 502

Answer: 40 521, 41 502, 45 120, 45 210

ASSESSMENT

NUMBERS TO 10 000 – PAGE B

NAME: _____

DATE: _____

SCORE: _____ / 20

SCHOOL FETE ATTENDANCE

SESSION	ATTENDANCE
Friday morning	18 746
Friday evening	24 309
Saturday morning	31 582
Saturday evening	29 950



1. ORDER THE ATTENDANCES (4 marks)

Write all four attendances from smallest to greatest.

Answer: _____

2. ROUND THE ATTENDANCES (12 marks)

ATTENDANCE	NEAREST 10	NEAREST 100	NEAREST 1 000
18 746			
24 309			
31 582			
29 950			

3. NUMBER CONSTRUCTION (4 marks)

Use each digit exactly once. The first digit cannot be 0.

5

0

8

2

4

Greatest number: _____ (1)

Smallest number: _____ (1)

Expanded notation of the greatest number: _____ (1)

Word form of the smallest number:

_____ (1)

ASSESSMENT **ANSWERS**

NUMBERS TO 10 000 – PAGE B

NAME: _____

DATE: _____

SCORE: _____ / 20

SCHOOL FETE ATTENDANCE

SESSION	ATTENDANCE
Friday morning	18 746
Friday evening	24 309
Saturday morning	31 582
Saturday evening	29 950



1. ORDER THE ATTENDANCES (4 marks)

Write all four attendances from smallest to greatest.

Answer: 18 746, 24 309, 29 950, 31 582

2. ROUND THE ATTENDANCES (12 marks)

ATTENDANCE	NEAREST 10	NEAREST 100	NEAREST 1 000
18 746	18 750	18 700	19 000
24 309	24 310	24 300	24 000
31 582	31 580	31 600	32 000
29 950	29 950	30 000	30 000

3. NUMBER CONSTRUCTION (4 marks)

Use each digit exactly once. The first digit cannot be 0.

5

0

8

2

4

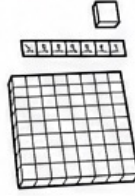
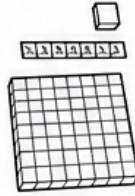
Greatest number: 85 420 (1)

Smallest number: 20 458 (1)

Expanded notation of the greatest number: 80 000 + 5 000 + 400 + 20 (1)

Word form of the smallest number: twenty thousand, four hundred and fifty-eight

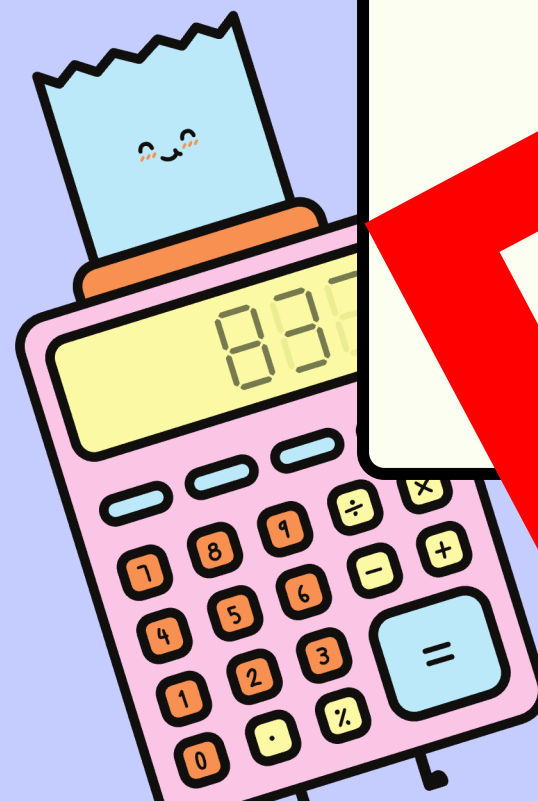
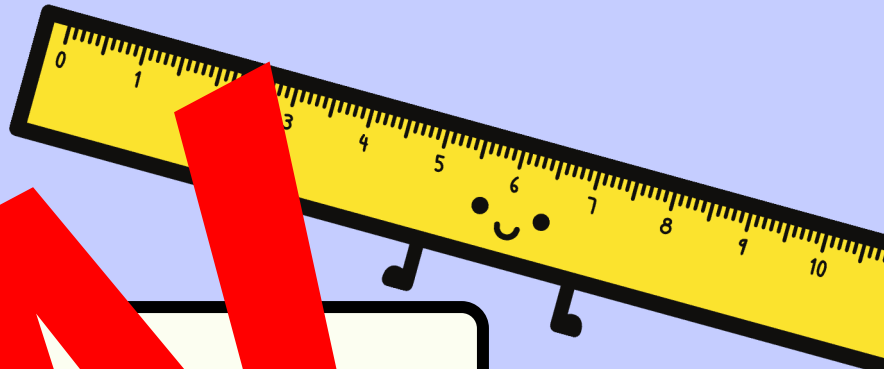
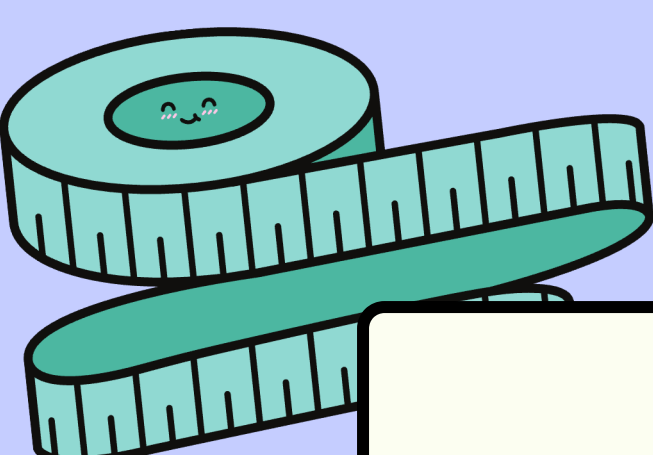
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NUMBERS TO 10 000 RUBRIC

STUDENT: _____ DATE: _____ TEACHER: _____

SKILL	BEGINNING	DEVELOPING	ACHIEVING	CONFIDENT	EXCEEDING
PLACE VALUE AND DIGIT VALUE	Identifies some digits with support.	Names place values up to thousands and may confuse tens and hundreds.	Identifies all five places and digit values accurately.	Explains how a digit's value changes between places.	Applies place value flexibly to unfamiliar partitions.
NUMERAL, WORD AND EXPANDED FORMS	Records one form with support.	Converts some numerals and word forms.	Converts accurately between all three forms.	Uses zero and punctuation accurately across forms.	Creates and justifies equivalent partitions.
ZERO AS A PLACEHOLDER	Notices zero but may omit it.	Places zero correctly in familiar examples.	Uses zero accurately as a placeholder.	Explains the place held by internal zeros.	Diagnoses and corrects zero-placement errors.
COMPARE AND ORDER	Compares numbers with support.	Compares when leading digits differ.	Uses $<$, $>$, $=$ and orders numbers accurately.	Explains the first unequal place.	Justifies complex orderings efficiently.
ROUND AND CONSTRUCT	Builds or rounds numbers with support.	Builds numbers and rounds familiar cases.	Builds greatest and smallest numbers; rounds to 10, 100 and 1 000.	Explains leading-zero limits and rounding choices.	Solves unfamiliar construction and rounding challenges.



PREVIEW

Numbers to 10 000

Learning Intention

We are learning to recognise, represent, read, write, compare, order and round numbers across ones to thousands places.



Groups of Ten

10 ones = 1 ten

10 tens = 1 hundred

10 hundreds = 1 thousand

10 thousands = 1 ten thousand

Each place is 10 times the place to its right.



The Five Places

TEN THOUSANDS | THOUSANDS | HUNDREDS | TENS | ONES

47 306 | 4 tens thousands, 7 thousands, 3 hundreds, 0 tens and 6 ones.



Build 47 306

4 | 7 | 3 | 0 |

000 + 300 + 0 + 6

the zero keeps the tens place.



Read 47 306

forty-seven thousand, three hundred and six

Read from the greatest place. Say 'and' before the final tens or ones part.



Words to a Numeral

seventy-two thousand and forty

72 030

it is a place value 0 where a place has no value.



Expanded Notation

$$47,300 + 40,000 + 7,000 + 300 + 5$$

We can add a zero to the value place without moving the other digits.



Your Turn: Expand

a. 7 482

b. 50 7 000

c. 81 030

d. 24 605



Answers: Expanded Notation

a. $30\ 000 + 6\ 000 + 400 + 80 + 2$

b. $50\ 000 + 700 + 9$

c. $80\ 000 + 1\ 000$

d. $20\ 000 + 1\ 000 + 600 + 5$



Find a Digit's Value

In 63 481, the digit 4 is in the hundreds place.

Its value is 400.

Place tells where a digit sits, and its value tells what it is worth.



Your Turn: Digit Values

a. Value of 7 in 47 306

b. Value of 5 in 50 294

c. Value of 6 in 8

d. Value of 6 in 61 90



Answers: Digit Values

a. 1000

b. 500

c. 600

d. 900



Zero Holds a Place

$$50\ 204 = 50\ 000 + 200 + 4$$

The zeros hold the thousands and tens places.

Without them, the number would mean something different.



Compare from the Left

$$38\ 642 > 38\ 426$$

The ten-thousands and the thousands digits match.

At the first unequal place, 6 hundreds is greater than 4 hundreds.



Your Turn: Compare

Write $<$, $>$ or $=$.

a. 50 090 ___ 50 900

b. 72 405 ___ 72 405

c. 82 070 ___ 82 007

d. 19 870 ___ 20 001



Answers: Compare

a. $50\ 090 < 50\ 900$

b. $72\ 405 = 72\ 405$

c. $83\ 070 > 83\ 000$

d. $19\ 876 < 20\ 001$



Ascending and Descending

Ascending means smallest to greatest.

Descending means greatest to smallest.

Compare one place at a time from left to right.



Your Turn: Order

Ascending:

23 410, 23 104, 21 430, 24 30

Descending:

78 810, 70 810, 79 810



Answers: Order

Ascending: 21 430, 23 104, 24 30, 24 30

Descending: 210, 012, 810, 70 012



Round to a Place

Nearest 10: check the ones digit.

Nearest 100: check the tens digit.

Nearest 1 000: check the hundreds digit.

0–4: keep it. 5–9: increase it.



Your Turn: Round

Round 31 582 to the nearest:

a. 10

b. 100

c. 1 000

Round 309 to the nearest 100.



Answers: Round

31 582 $\rightarrow$ 31 580 (nearest 10)

31 582 $\rightarrow$ 31 600 (nearest 100)

31 582 $\rightarrow$ 32 000 (nearest 1 000)

24 309 $\rightarrow$ 24 000 (nearest 1000)



Review

1. Every place is 10 times the place to its left.
2. Zero can hold a place.
3. A number can be written in standard form, words or expanded notation.
4. Compare numbers from the left.
5. Rounding to the left is immediately to the right.





Numbers to 10 000 Quiz

Question 1

What is the value of the digit 7 in 47,006?

A. 70

B. 700

C. 7,000

D. 70,000



Answer 1

C. 7,000

The 7 is in the thousands place.



Question 2

Write 0.70 in expanded notation.

PREVIEW



Answer 2

$$5000 + 7000 = 12000$$

PREVIEW



Question 3

True or false

In 40,002, the zero holds the thousands place.



Answer 3

The zero is in the thousands place and 5 is in the hundreds place.



Question 4

Which numeral is seventy-two thousand and thirty?

A. 72 300

B. 72 030

C. 70 230

D. 7 230



Answer 4

PREVIEW

2.72 03



Question 5

Write 3 605 in words.

PREVIEW



Answer 5

eighty-three thousand, six hundred and five

PREVIEW



Question 6

Which statement is correct?

A. $38\ 420 < 38\ 402$

B. $50\ 090 > 50\ 090$

C. $72\ 205 < 72\ 250$

D. $64\ 000 > 64\ 008$



Answer 6

72 305 72 0

The first equal place is the tens place.



Question 7

Order from smallest to greatest:

45 10, 40 52 45 120, 41 502



Answer 7

4 521 502, 45 45 210

PREVIEW



Question 8

True or false

A digit is worth 10 times as much when it moves one place to the left.



Answer 8

PREVIEW

Th

For example, tens is 10 and 6 hundreds is 600.



Question 9

Round 31 582 to the nearest 100.

A. 31 500

B. 31 580

C. 31 600

D. 32 000



Answer 9

C. 32,000

the tens digit is 3, so the hundreds digit rounds up.



Question 10

Use 5, 8, 2 and 1 exactly once.

What is the greatest five-digit number you can make?



Answer 10

8500

Place the greatest digits first.



