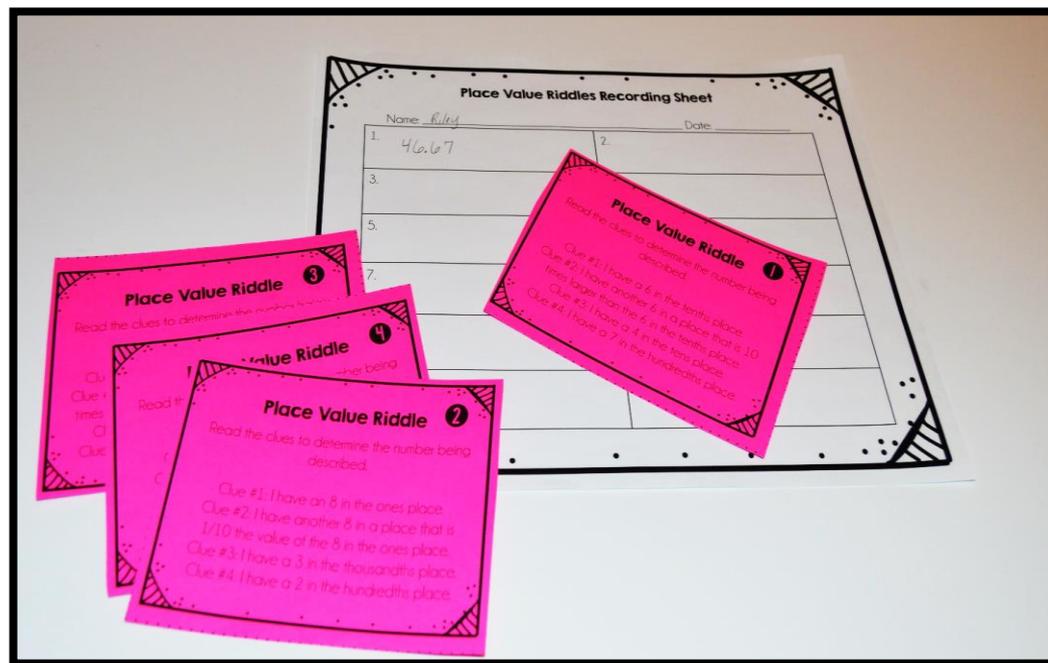


Place Value Riddles

Teacher Notes: The students read 4-5 clues about a number. They use the clues to write the number being described. This includes clues referring to adjacent place value. (Example: The tens place is $\frac{1}{10}$ the value of the hundreds place.)



Place Value Riddles

Directions: Read the clues on each card to determine the number being described.

Place Value Riddle 1

Read the clues to determine the number being described.

Clue #1: I have a 6 in the tenths place.

Clue #2: I have another 6 in a place that is 10 times larger than the 6 in the tenths place.

Clue #3: I have a 4 in the tens place.

Clue #4: I have a 7 in the hundredths place.

Place Value Riddle 2

Read the clues to determine the number being described.

Clue #1: I have an 8 in the ones place.

Clue #2: I have another 8 in a place that is $\frac{1}{10}$ the value of the 8 in the ones place.

Clue #3: I have a 3 in the thousandths place.

Clue #4: I have a 2 in the hundredths place.

Place Value Riddle 3

Read the clues to determine the number being described.

Clue #1: I have a 5 in the hundreds place.

Clue #2: I have another 5 in a place that is 10 times larger than the 5 in the hundreds place.

Clue #3: I have a 3 in the tenths place.

Clue #4: I have a 4 in the thousandths place.

Place Value Riddle 4

Read the clues to determine the number being described.

Clue #1: I have a 3 in the tenths place.

Clue #2: I have a 7 in the hundreds place.

Clue #3: I have another 7 that is $\frac{1}{10}$ the value of the 7 in the hundreds place

Clue #4: I have a 9 in the ones place.

Place Value Riddle

5

Read the clues to determine the number being described.

Clue #1: I have a 9 in the tenths place.

Clue #2: I have a 3 in the ones place.

Clue #3: I have another 3 in a place that is 10 times larger than the 3 in the ones place.

Clue #4: I have a 7 in the hundredths place.

Place Value Riddle

7

Read the clues to determine the number being described.

Clue #1: I have an 8 in the thousands place.

Clue #2: I have another 8 in a place that is 10 times larger than the 8 in the thousands place.

Clue #3: I have a 5 in the tenths place.

Clue #4: I have a 3 in the tens place.

Clue #5: I have a 9 in the ones place.

Place Value Riddle

6

Read the clues to determine the number being described.

Clue #1: I have a 7 in the tenths place.

Clue #2: I have another 7 in a place that is $\frac{1}{10}$ the value of the 7 in the tenths place.

Clue #3: I have a 3 in the ones place.

Clue #4: I have an 8 in the thousands place.

Place Value Riddle

8

Read the clues to determine the number being described.

Clue #1: I have a 9 in the hundredths place.

Clue #2: I have a 4 in the ones place.

Clue #3: I have another 4 that is $\frac{1}{10}$ the value of the 4 in the ones place

Clue #4: I have a 7 in the hundreds place.

Clue #5: I have a 1 in the thousands place.

Place Value Riddle

9

Read the clues to determine the number being described.

Clue #1: I have a 1 in the ones place.

Clue #2: I have a 2 in the hundredths place.

Clue #3: I have another 2 in a place that is 10 times larger than the 2 in the hundredths place.

Clue #4: I have a 5 in the hundred thousands place.

Place Value Riddle

10

Read the clues to determine the number being described.

Clue #1: I have a 9 in the millions place.

Clue #2: I have another 9 in a place that is $\frac{1}{10}$ the value of the 9 in the millions place.

Clue #3: I have a 3 in the thousands place.

Clue #4: I have a 4 in the hundredths place.

Place Value Riddle

11

Read the clues to determine the number being described.

Clue #1: I have a 6 in the ones place.

Clue #2: I have another 6 in a place that is 10 times larger than the 6 in the ones place.

Clue #3: I have a 4 in the tenths place.

Clue #4: I have a 7 in the hundredths place.

Clue #5: I have a 9 in the thousandths place.

Place Value Riddle

12

Read the clues to determine the number being described.

Clue #1: I have a 8 in the ten thousands place.

Clue #2: I have a 7 in the hundredths place.

Clue #3: I have another 7 that is $\frac{1}{10}$ the value of the 7 in the hundredths place

Clue #4: I have a 6 in the hundreds place.

Clue #5: I have a 5 in the thousands place.

Place Value Riddles Recording Sheet

Name: _____ Date: _____

1.	2.
3.	4.
5.	6.
7.	8.
9.	10.
11.	12.

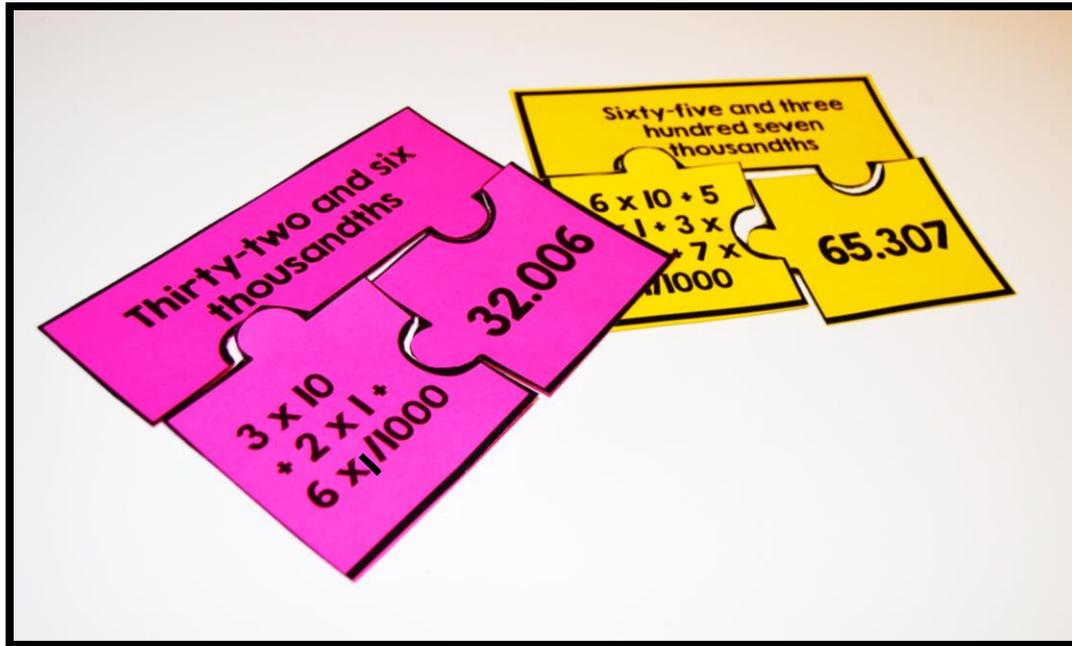
Place Value Riddles Answer Key

1. 46.67	2. 8.823
3. 5,500.34	4. 779.3
5. 33.97	6. 8,003.77
7. 88,039.5	8. 1,704.49
9. 500,001.22	10. 9,903,000.04
11. 66.479	12. 85,600.077

DECIMAL PUZZLES

Teacher Notes:

The students will match the three puzzle pieces to find the three representations of the same decimal: base ten numeral form, number name form, and expanded form.



DECIMAL PUZZLES

Directions: Match the pieces of the puzzle by finding the three representations of the same decimal.

**Sixty-five and three
hundred seven
thousandths**

$$6 \times 10 + 5$$

$$\times 1 + 3 \times$$

$$1/10 + 7 \times$$

$$1/1000$$

65.307

**Sixty-five and thirty-
two hundredths**

$$6 \times 10 + 5 \times$$

$$1 + 3 \times 1/10$$

$$+ 2 \times 1/100$$

65.32

Sixty-six and seventy-four hundredths

$$\begin{aligned} &6 \times 10 + \\ &6 \times 1 + 7 \\ &\times 1/10 + \\ &4 \times 1/100 \end{aligned}$$

66.74

Fifty-seven and two hundred forty-one thousandths

$$\begin{aligned} &5 \times 10 + 7 \times \\ &1 + 2 \times 1/10 \\ &+ 4 \times 1/100 \\ &+ 1 \times 1/1000 \end{aligned}$$

57.241

**One hundred one and
fifty-six thousandths**

$$\begin{aligned} &1 \times 100 + 1 \times 1 \\ &+ 5 \times 1/100 + \\ &6 \times 1/1000 \end{aligned}$$

101.056

**One hundred one and
fifty-six hundredths**

$$\begin{aligned} &1 \times 100 + 1 \times 1 \\ &+ 5 \times 1/10 \\ &+ 6 \times 1/100 \end{aligned}$$

101.56

**Three hundred
twenty-one and nine hundred
eighty-six thousandths**

$$\begin{aligned} & 3 \times 100 \\ & + 2 \times 10 + 1 \times 1 \\ & + 9 \times 1/10 \\ & + 8 \times 1/100 \\ & + 6 \times 1/1000 \end{aligned}$$

321.986

**Thirty-two and six
thousandths**

$$\begin{aligned} & 3 \times 10 \\ & + 2 \times 1 + \\ & 6 \times 1/1000 \end{aligned}$$

32.006

**Fifteen and nine hundred
eighty-six thousandths**

$$1 \times 10^+$$

$$5 \times 1^+$$

$$9 \times 1/10^+$$

$$8 \times 1/100^+$$

$$6 \times 1/1000$$

15.986

**Fifteen and six
thousandths**

$$1 \times 10^+$$

$$5 \times 1^+$$

$$6 \times$$

$$1/1000$$

15.006

**Two thousand, one
hundred six and eight
tenths**

$$\begin{aligned} & 2 \times 1,000 \\ & + 1 \times 100 \\ & + 6 \times 1 + \\ & 8 \times 1/10 \end{aligned}$$

2,106.8

**Two thousand, one hundred
sixty and eight thousandths**

$$\begin{aligned} & 2 \times 1,000 \\ & + 1 \times 100 + \\ & 6 \times 10 + \\ & 8 \times 1/1000 \end{aligned}$$

2,160.008

**Nine
thousandths**

$$9 \times \frac{1}{1000}$$

$$0.009$$

Nine tenths

$$9 \times \frac{1}{10}$$

$$0.9$$

**One and forty-nine
hundredths**

$$1 \times 1 +$$

$$4 \times 1/10 +$$

$$9 \times 1/100$$

1.49

**One and three hundred
twenty-two thousandths**

$$1 \times 1 +$$

$$3 \times 1/10 +$$

$$2 \times 1/100 +$$

$$2 \times 1/1000$$

1.322

Decimal Puzzles Recording Sheet

Name: _____ Date: _____

Decimal Puzzles Answer Key 1 of 2

Name: _____ Date: _____

65.307	Sixty-five and three hundred seven thousandths	$6 \times 10 + 5 \times 1 + 3 \times \frac{1}{10} + 7 \times \frac{1}{1000}$
65.32	Sixty-five and thirty-two hundredths	$6 \times 10 + 5 \times 1 + 3 \times \frac{1}{10} + 2 \times \frac{1}{100}$
66.74	Sixty-six and seventy-four hundredths	$6 \times 10 + 6 \times 1 + 7 \times \frac{1}{10} + 4 \times \frac{1}{100}$
57.241	Fifty-seven and two hundred forty-one thousandths	$5 \times 10 + 7 \times 1 + 2 \times \frac{1}{10} + 4 \times \frac{1}{100} + 1 \times \frac{1}{1000}$
101.056	One hundred one and fifty-six thousandths	$1 \times 100 + 1 \times 1 + 5 \times \frac{1}{100} + 6 \times \frac{1}{1000}$
101.56	One hundred one and fifty six hundredths	$1 \times 100 + 1 \times 1 + 5 \times \frac{1}{10} + 6 \times \frac{1}{100}$
321.986	Three hundred twenty-one and nine hundred eighty-six thousandths	$3 \times 100 + 2 \times 10 + 1 \times 1 + 9 \times \frac{1}{10} + 8 \times \frac{1}{100} + 6 \times \frac{1}{1000}$
32.006	Thirty-two and six thousandths	$3 \times 10 + 2 \times 1 + 6 \times \frac{1}{1000}$

Decimal Puzzles Answer Key 2 of 2

Name: _____ Date: _____

15.986	Fifteen and nine hundred eighty-six thousandths	$1 \times 10 + 5 \times 1 + 9 \times 1/10 + 8 \times 1/100 + 6 \times 1/1000$
15.006	Fifteen and six thousandths	$1 \times 10 + 5 \times 1 + 6 \times 1/1000$
2,106.8	Two thousand, one hundred six and eight tenths	$2 \times 1,000 + 1 \times 100 + 6 \times 1 + 8 \times 1/10$
2,160.008	Two thousand, one hundred sixty and eight thousandths	$2 \times 1,000 + 1 \times 100 + 6 \times 10 + 8 \times 1/1000$
0.009	Nine thousandths	$9 \times 1/1000$
0.9	Nine tenths	$9 \times 1/10$
1.49	One and forty-nine hundredths	$1 \times 1 + 4 \times 1/10 + 9 \times 1/100$
1.322	One and three hundred twenty-two thousandths	$1 \times 1 + 3 \times 1/10 + 2 \times 1/100 + 2 \times 1/1000$

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Thanks!
Jennifer Findley

Credits:

