

Learn About

Building Number Sense: Place Value and Writing Numbers

Numbers are made up of digits. Each digit in a number has a **place value**. The value of a digit depends on its place in a number. The chart below shows the place values of the digits in the number 42,368. The value of the 2 in this number is 2,000.

ten thousands (10,000)	thousands (1000)	hundreds (100)	tens (10)	ones (1)
4	2	3	6	8

The number 42,368 has 4 ten thousands, 2 thousands, 3 hundreds, 6 tens and 8 ones. Numbers can be written in different ways.

- Standard form: 42,368
- Word form: forty-two thousand, three hundred and sixty-eight
- Expanded form: $40,000 + 2,000 + 300 + 60 + 8$

Frank and his parents travelled 1542 kilometres to see Frank's grandparents. What is the value of the 5 in the number 1542?



The 5 is in the hundreds place.
Five hundreds is 500.
The value of the 5 is **500**.



Each digit in a number has a **place value**. The place value of a digit depends on its place in a number. Numbers can be written in standard form, in word form, or in expanded form.

*Look at the answer choices for each question.
Read why each answer choice is correct or
not correct.*

1. The pet shop sold containers of fish food. The largest container held 2350 tiny pellets of fish food. What is the value of the 2 in the number 2350?

● 2000

This is the correct answer. The 2 is in the thousands place. Two thousands equals 2000.

Ⓐ 200

This is not the correct answer. The 2 is in the thousands place. Two thousands equals 2000, not 200 (or 2 hundreds).

Ⓑ 20

This is not the correct answer. The 2 is in the thousands place. Two thousands equals 2000, not 20 (or 2 tens).

Ⓒ 2

This is not the correct answer. The 2 is in the thousands place. Two thousands equals 2000, not 2 (or 2 ones).

2. What fraction of the fish in the tank had stripes?

Ⓐ $\frac{4}{4}$

This is not the correct answer. There are 12 equal parts in the figure. There are 4 shaded parts. The fraction is $\frac{4}{12}$ or $\frac{1}{3}$, not $\frac{4}{4}$.

Ⓑ $\frac{1}{2}$

This is not the correct answer. There are 12 equal parts in the figure. There are 4 shaded parts. The fraction is $\frac{4}{12}$ or $\frac{1}{3}$, not $\frac{1}{2}$.

● $\frac{1}{3}$

This is the correct answer. There are 12 equal parts in the figure. There are 4 shaded parts. The fraction is $\frac{4}{12}$ or $\frac{1}{3}$.

Ⓓ $\frac{1}{4}$

This is not the correct answer. There are 12 equal parts in the figure. There are 4 shaded parts. The fraction is $\frac{4}{12}$ or $\frac{1}{3}$, not $\frac{1}{4}$.

Lesson

6

*Read the passage.
Then do Numbers 1–5.*

Sydney Harbour Bridge

Thousands of people visit the Sydney Harbour Bridge each year. Visitors can climb 200 steps to reach the top of the bridge. If they wish they can then climb all the way along the top of the arch to the other side of the bridge! After reaching the top, adventurers enjoy a bird's-eye view of Sydney and its beautiful harbour.



1. The Sydney Harbour Bridge was completed on 19 January 1932. What is the value of the 1 in 1932?

- Ⓐ 100
- Ⓑ 1000
- Ⓒ 10,000
- Ⓓ 100,000

2. The bridge weighs 52,800 tonnes. What is the word form of the number 52,800?

- Ⓐ Five thousand and fifty four
- Ⓑ Five thousand, two hundred and eighty
- Ⓒ Fifty-two thousand and eighty
- Ⓓ Fifty-two thousand, eight hundred

Read the passage.
Then do Numbers 1–5.

Australian Rivers

Nell is learning about rivers in school. She wrote a report about some rivers in Australia. She recorded the lengths of the country's longest rivers. Nell wrote her data in the table shown here.

Longest Rivers in Australia

Name	Length (km)
Cooper Creek	1113
Darling River	1472
Flinders River	1004
Lachlan River	1339
Murrumbidgee River	1485
Murray River	2375

1. What is the length of the Murray River expressed in word form?

- Ⓐ two thousand, three hundred and seventy
- Ⓑ two thousand, three hundred and seventy-five
- Ⓒ two thousand, three hundred
- Ⓓ two thousand, three hundred and five

2. Which river's length has the digit 3 with a value of 300?

- Ⓐ Lachlan River
- Ⓑ Darling River
- Ⓒ Murray River
- Ⓓ Cooper Creek

Self-Assessment 2

Lessons 6–10

Answer these questions after you have completed Lessons 6–10. Before you begin, re-read what you wrote in Self-Assessment 1.

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Name _____ Date _____

1. Rate your work in Lessons 6–10. Circle your answer.

successful

somewhat successful

needs improvement

2. Did any of the questions give you trouble? _____

If so, what kind of trouble did you have?

Is this the same kind of trouble you had in Lessons 1–5? _____

3. Did you find the questions easier or more difficult than those in Lessons 1–5?

Why do you think this is so?

4. Did you meet the goal you set for yourself for Lessons 6–10? _____

Why or why not?

5. What is your goal for Lessons 11–15?

Cut along the dotted line.