Term 1 Place value

Monday

Think about these questions

What is place value?

What can you remember about place value?

Can you give me an example of a number and talk through the value of each digit?

Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Use this place value chart to copy into your books for the following numbers:

1. 2 000 403
2. 12 089 099
3. 4 506 923
4. 4982
5. 09

Challenge:
Explain for each one what the **red** number represents

Maths LI: I can determine what given digit represents in each number.

Task:
Work through the worksheet.
Make sure you write out the question and the answer.
Ensure your work is well laid out and clear.
Use a double margin!

Challenge:
Create your own numbers and choose one number to discuss its representation.

Make sure you grade your work, how did you find it?
Red – not so good
Orange – okay!
Green – I can do this!

Tuesday

Remember It

64 000

Can you read this number?

Could you read it?

It says sixty-four thousand.

We are going to think about everything we know about this number.

Remember It

64 000

What can we say about this number?
Can you tell your partner a fact about 64 000?

Complete these facts about 64 000.

1. 64 000 is made up of ___**four thousand**___ sixty thousand.
2. There are ___**6400**___ tens in 64 000.
3. One more than 64 000 is ___**64 001**___
4. ___**63 999**___ is one less than 64 000.
5. 64 000 is ___**36 000**___ less than 100 000.
6. 10 000 more than 64 000 is ___**74 000**___

Describing Digits

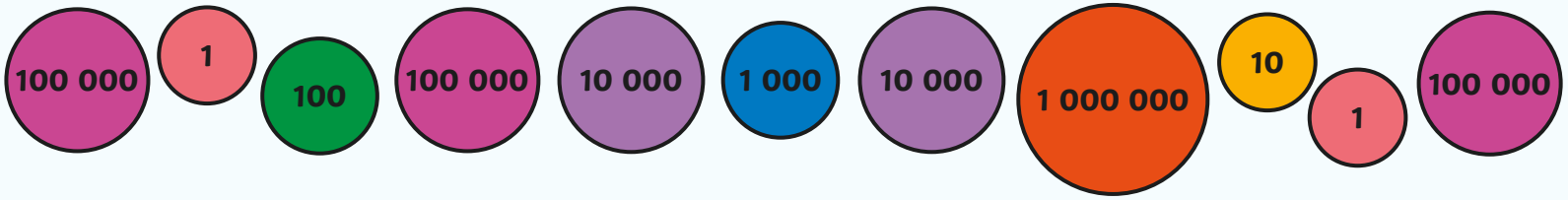
Today we are going to be digit detectives!

We will explore and describe the value of the different digits in a number.

Each digit in a number has a particular value depending on its place in the number. This is what place value is all about!

Describing Digits

In previous lessons, place value counters were ordered from right to left to find the value of different whole numbers. What number is represented?



Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
1 000 000	100 000 100 000 100 000	10 000 10 000	1 000	100	10	1 1

1 321 112

1 232 121

1 301 112

Describing Digits

We can use a place value grid to find out the value of each digit in a number.

Each digit of a number goes into a different column in the grid.

We always start at the right when writing digits in the columns.

Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Describing Digits

Let's try an example all together.

We will put the following number into the place value grid:

4 768 235

Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	4	**7**	**6**	**8**	**2**	**3**	**5**

Describing Digits

4 768 235

Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
	4	7	6	8	2	3	5

The digit in the ten thousands column is 6.
It represents 6 ten thousands, or 60 thousands.

Describing Digits

Have a go at this one yourself in your book!
Choose which level you would like to start at. Try and challenge yourself if you feel confident!

★	★★	★★★
85 923	734 691	5 841 926

Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Describing Digits

Let's have a look at how the numbers fit into the place value grid.

★	★★	★★★
85 923	734 691	5 841 926

Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
			8	5	9	2	3
		7	3	4	6	9	1
	5	8	4	1	9	2	6

Describing Digits

734 691 does not have a 9 in the hundreds place.

★	★★	★★★
85 923	734 691	5 841 926

Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
			8	5	9	2	3
		7	**3**	**4**	**6**	**9**	**1**
	5	8	4	1	9	2	6

Describing Digits

The 8 in 85 923 represents 8 ten thousands. The 8 in 5 841 926 represents 8 hundred thousands. The value of the digit 8 is greatest in 5 841 926.

★	★★	★★★
85 923	734 691	5 841 926

Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
			8	5	9	2	3
		7	3	4	6	9	1
	5	**8**	4	1	9	2	6

Digit Detectives

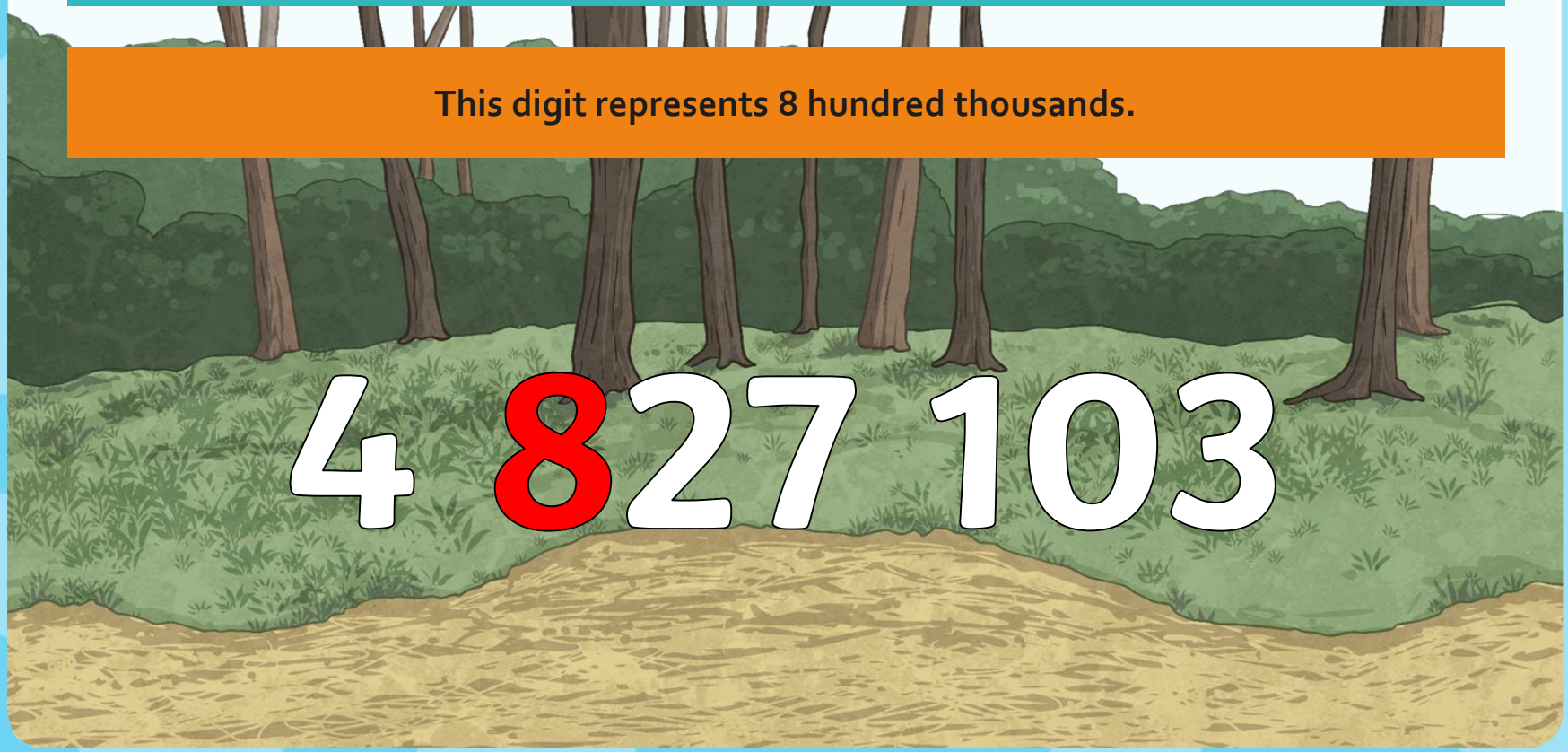
What is the value of this red digit?

This digit represents 9 hundreds.

Digit Detectives

Whole Class

What is the value of this red digit?

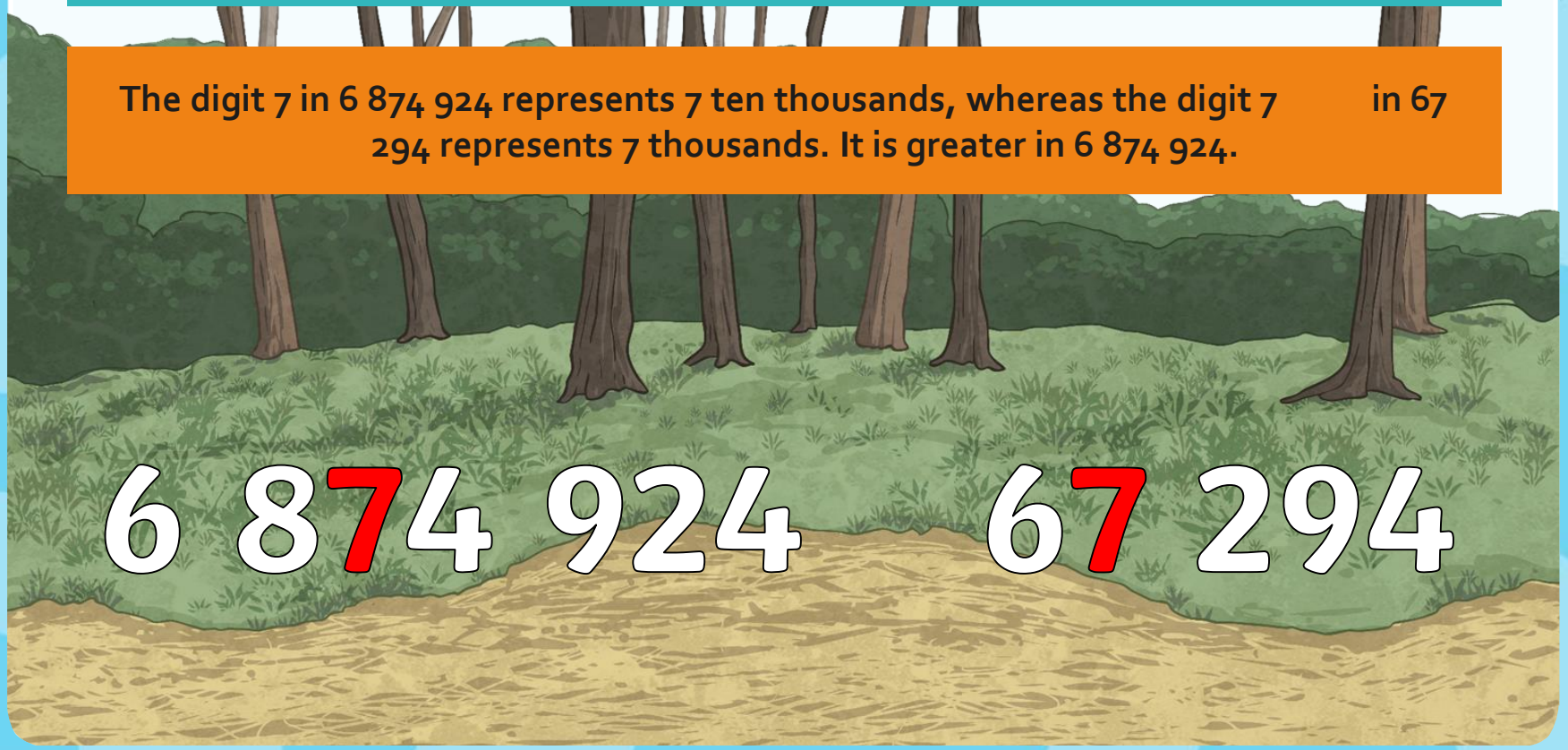


This digit represents 8 hundred thousands.

Digit Detectives

Whole Class

Which of these red digits is greater?



The digit 7 in 6 874 924 represents 7 ten thousands, whereas the digit 7 in 67 294 represents 7 thousands. It is greater in 6 874 924.

Digit Detectives

What would you need to add to change the red digit into a 7?

The magnified digit represents 4 ten thousands. To change it into a 7, we would need to add 3 ten thousands, or 30 000.

5 349 102

Maths LI: I can compare the given digit in a whole number.

Task:

Using your place value number cards in pairs work together to distinguish the value of each number.

You will need to copy ONE place value chart, ensure you have not drawn the bottom of the table so you can add many to this chart.

Then work through your cards together and determine where each number should be.

Check with your partner, and discuss the value of each number.

Make sure you grade your work, how did you find it?

Red – not so good

Orange – okay!

Green – I can do this!

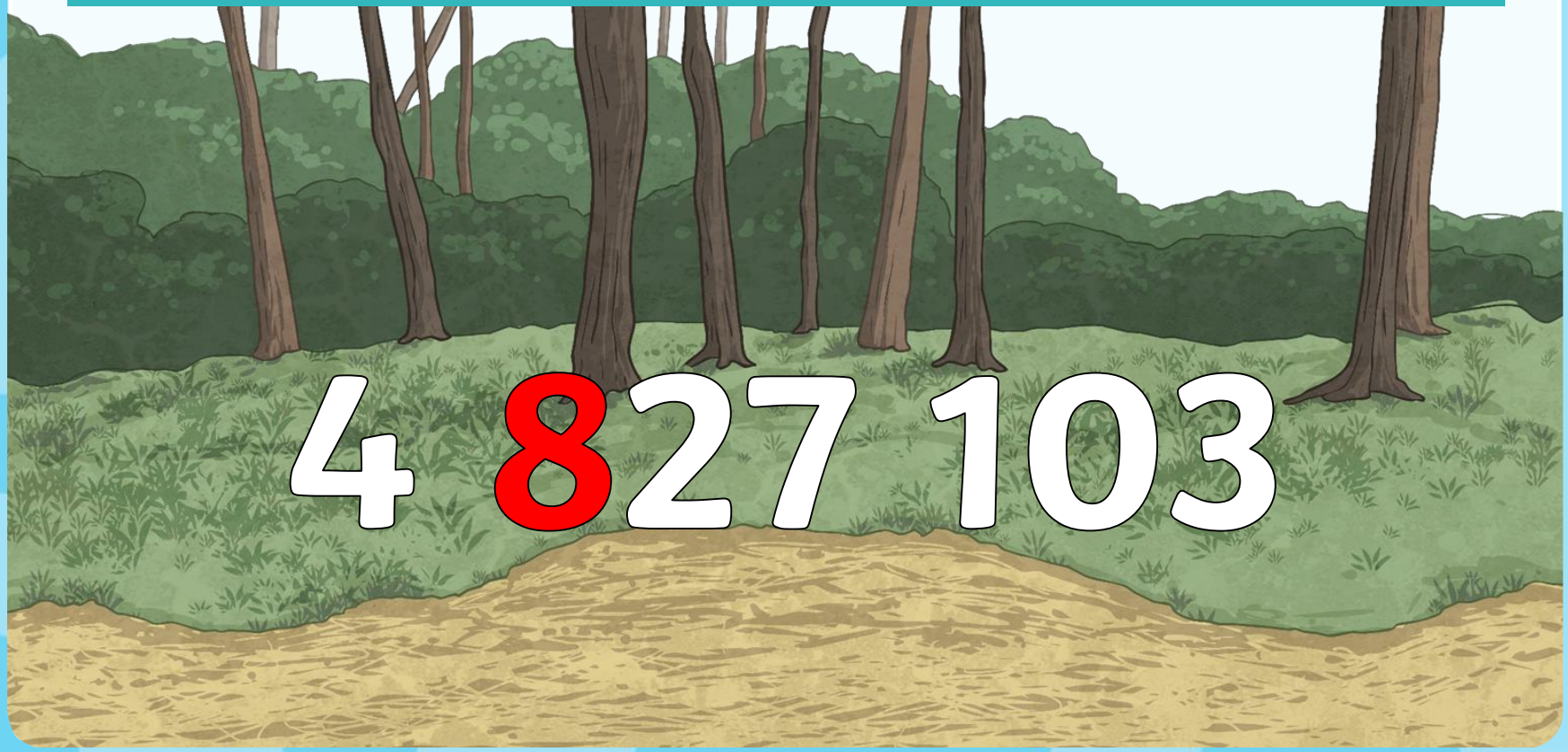
Wednesday

Order the numbers from smallest to largest.

smallest					largest
989 999	874 562	988 887	888 711	752 100	1 000 000

Let's recap!

What is the value of this red digit?



Maths LI: I can find the missing number in addition and subtraction sentences.

Task:
Work through the worksheet.
Make sure you write out the question and the answer.
Ensure your work is well laid out and clear.
Use a double margin!

Challenge:
Create your own five number sentences and choose one number to miss.
Then, can you ask your partner to answer your questions?
Make sure you talk through the answers together!

Make sure you grade your work, how did you find it?
Red – not so good
Orange – okay!
Green – I can do this!

Thursday

Order the numbers from smallest to largest.

smallest					largest
432 717	623 198	411 861	1 000 000	569 011	765 134

Maths LI: I can challenge my partner to determine the value of a number.

Task:
With a whiteboard and pen, challenge your partner!
Create your own number, then challenge your partner to determine the value of each number.
In your books, copy 3 examples each.

Make sure you grade your work, how did you find it?
Red – not so good
Orange – okay!
Green – I can do this!

Friday