Number and Place Value: Rounding 4-Digit Numbers to 1000

Aim:	
Round any number to the neares	t 10, 100 c
1000.	

DfE Ready-to-Progress Criteria: Reason about the location of any four-digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each. (4NPV-3)

To round 4-digit numbers to the nearest 1000.

Success Criteria:

I can identify the multiples of 1000 that a 4-digit number is between.

I can identify which digit to focus on in order to round to 1000.

I can identify which digits round up and which digits round down.

Key/New Words:

Round, digit, place value, thousands, hundreds, tens, ones, whole number.

Resources:

Lesson Pack

Preparation:

Differentiated Rounding 4-Digit Numbers to 1000 Activity Sheets - 1 per child

Diving into Mastery Activity Sheets - as required

Prior Learning: Year 3 Conceptual Prerequisite: Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 10 and 100.

Learning Sequence



Remember It: Using the corresponding slide on the Lesson Presentation, the children practise counting forwards and backwards from any 4-digit number in steps of 100, crossing multiples of 1000. Can the children explain which digit always changes when counting in steps of 100, and what happens to the digits in a number when crossing a multiple of 1000?





Rounding on a Number Line: Use the corresponding slides on the Lesson Presentation to demonstrate how to use a number line to round a 4-digit number to 1000 by identifying if it is closer to the previous or next multiple of 1000. The third example demonstrates how a number with five hundreds rounds up to the next multiple of 1000.





Rounding on a Number Line Practice: Using the corresponding slides on the Lesson Presentation, the children practise using a number line to round a 4-digit number to 1000 by identifying if it is closer to the previous or next multiple of 1000. Can the children identify the multiples of 1000 that a 4-digit number is between?





Place Value Rounding: Use the corresponding slides on the Lesson Presentation to demonstrate how to round 4-digit numbers to 1000 without using a number line by looking at the value of the hundreds digit. Emphasise the rounding rules - less than 5 hundreds round down to the previous multiple of 1000, and 5 or more hundreds round up to the next multiple of 1000. Can the children identify which digit to focus on in order to round to 1000? Do they know when a number rounds up and when a number rounds down?





Rounding Races: Children complete the Differentiated Rounding 4-Digit Numbers to 1000 Activity Sheets to demonstrate they can round 4-digit numbers to the nearest 1000.





Use the blank number line to support with rounding 4-digit numbers to nearest 1000.



Round 4-digit numbers to the nearest 1000.



reasoning give a number that will round to a given multiple of 1000.





Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.





Children complete fluency questions involving rounding 4-digit numbers to the nearest 1000.



Children answer reasoning questions involving rounding 4-digit numbers to the nearest 1000.



Children work individually or collaboratively on problem-solving questions rounding 4-digit numbers to the nearest 1000.



Photo Finish: Children think of a three or four-digit number which rounds to the same number when rounding to the nearest 100 and 1000.



Exploreit

Roundit: Children complete the Rounding to 1000 Differentiated Activity Sheet.

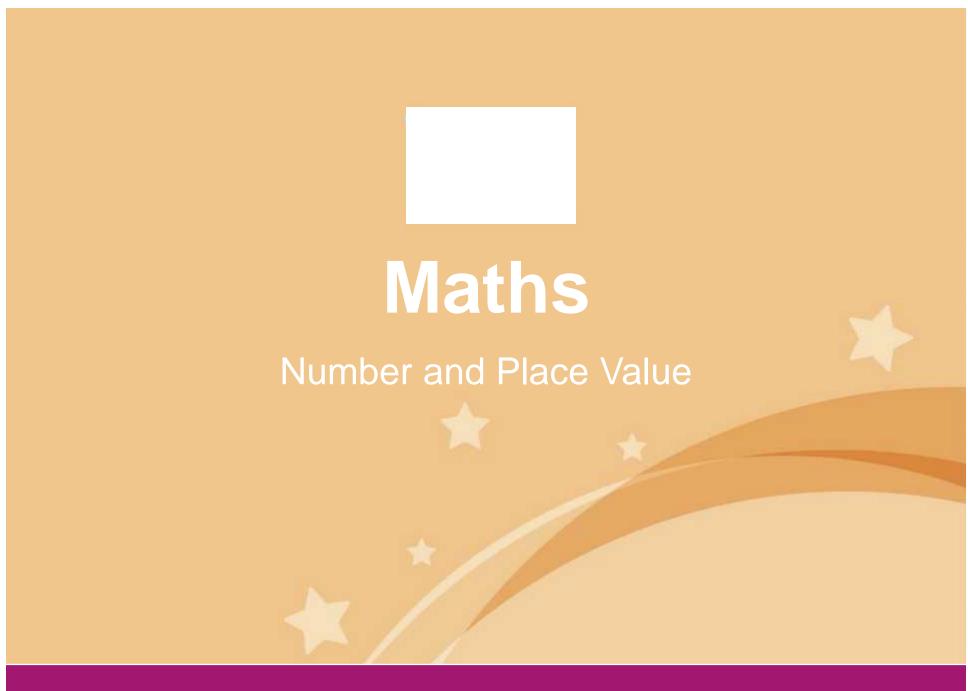
Revealt: Children complete the rounding questions on the Rounding Reveal the Picture Activity. Can they guess the picture before it is

fully revealed?

Rememberit: Children create rhyme to remember how to round a given number to the nearest 1000. They could use this fabulous Rounding

to 1000 Poem Number Line Banner as inspiration!

Learnit: Children will find this visually exciting Knowledge Organiser a useful tool to support their understanding of place value.



Maths | Number and Place Value | Rounding | Lesson 4 of 5: Rounding 4-digit Numbers to 1000

Rounding 4-digit Numbers to 1000





Aim

• To round 4-digit numbers to the nearest 1000.

Success Criteria

- I can identify the multiples of 1000 that a 4-digit number is between.
- I can identify which digit to focus on in order to round to 1000.
- I can identify which digits round up and which digits round down.

Remember It



Let's count forwards or backwards in steps of 100 from a 4-digit number.

Count the next 5 numbers in each sequence.

1600, 1700...

2497, 2397...

8702, 8802...

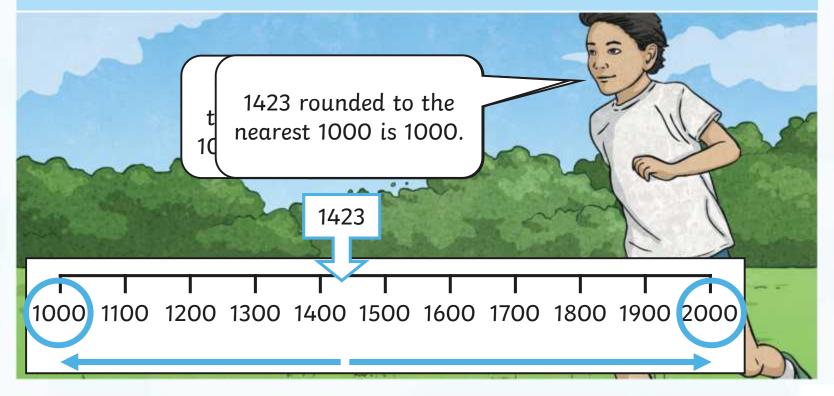
5102, 5002...

Which digit will always change when you count in hundreds?

Which digits will change when you cross a multiple of 1000?

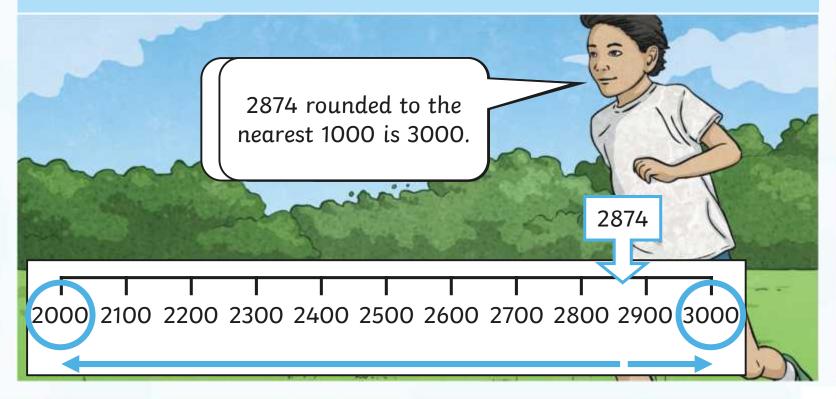
Rounding on a Number Line

When we round a number, we make it simpler but keep its value close to what it was. For example, we might round a number to the nearest 10, 100 or 1000.



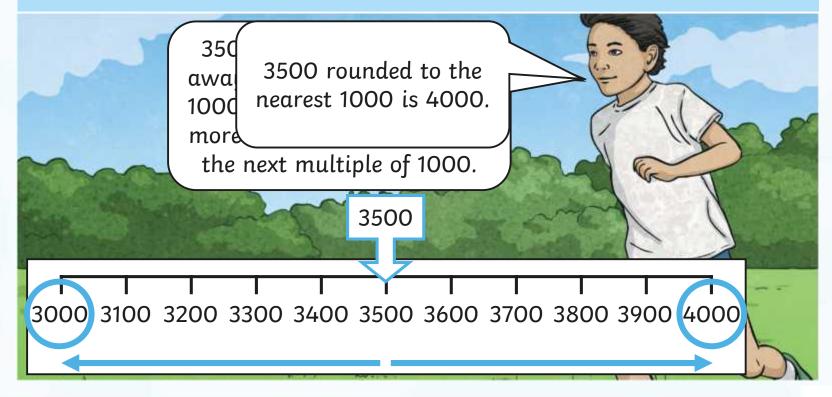
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Rounding on a Number Line

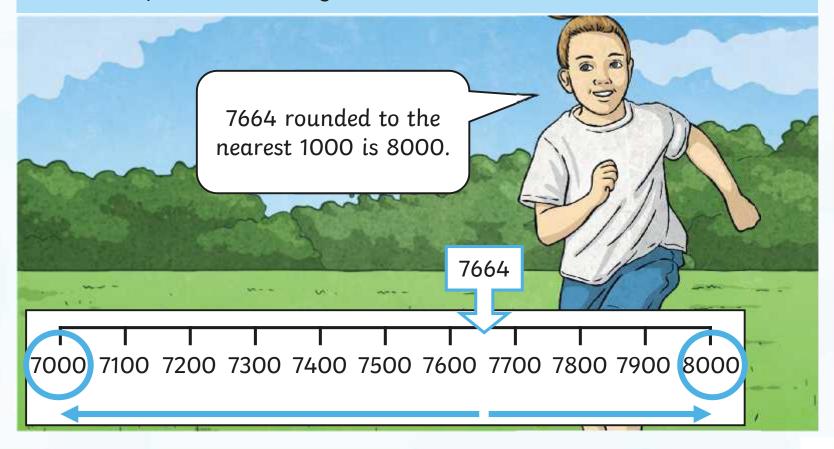
When we round a number, we make it simpler but keep its value close to what it was. For example, we might round a number to the nearest 10, 100 or 1000.



Rounding on a Number Line Practice



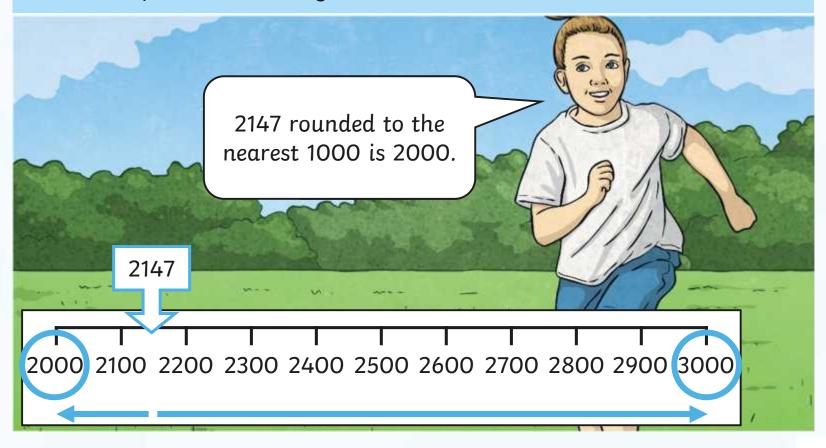
Let's practise rounding to the nearest 1000 on a number line.



Rounding on a Number Line Practice



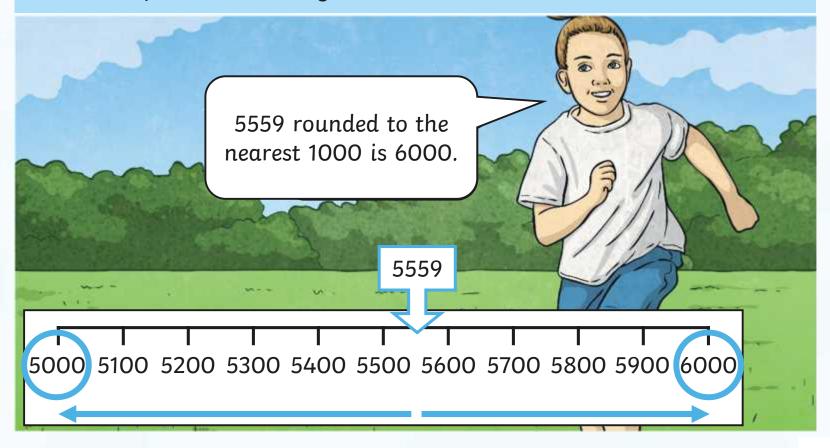
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Rounding on a Number Line Practice



Let's practise rounding to the nearest 1000 on a number line.

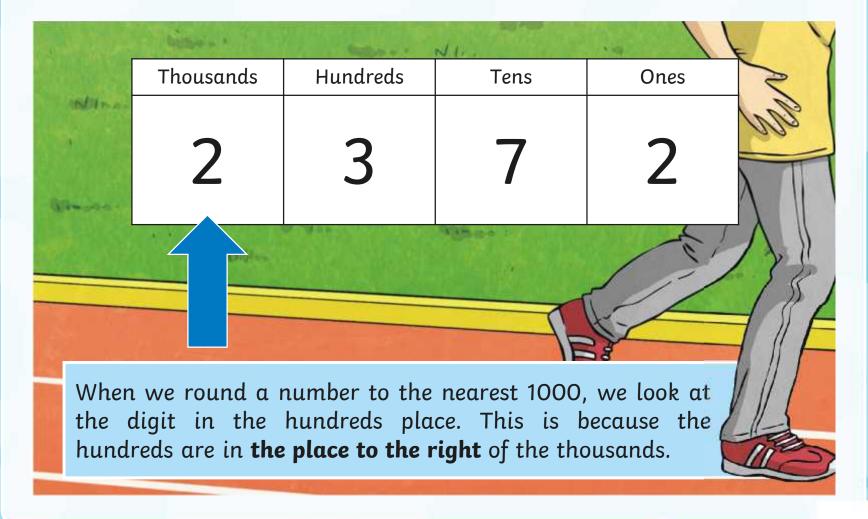


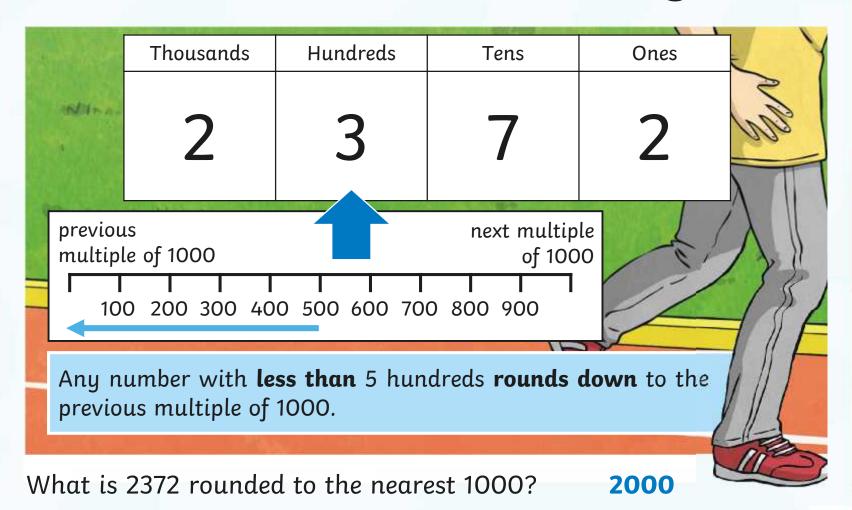
We can round numbers without using a number line. We do this by using what we know about place value.

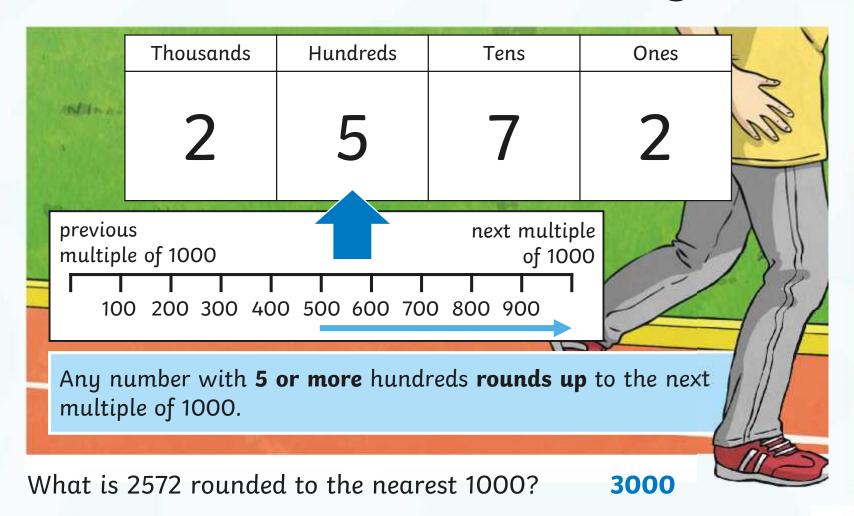
Thousands	Hundreds	Tens	Ones	M
2	3	7	2	

In order to round to a particular value, we need to know which digit to focus on to tell us whether to round up or round down.

The rule for identifying the digit to focus on is to look at the digit in **the place to the right** of the value we are rounding to.



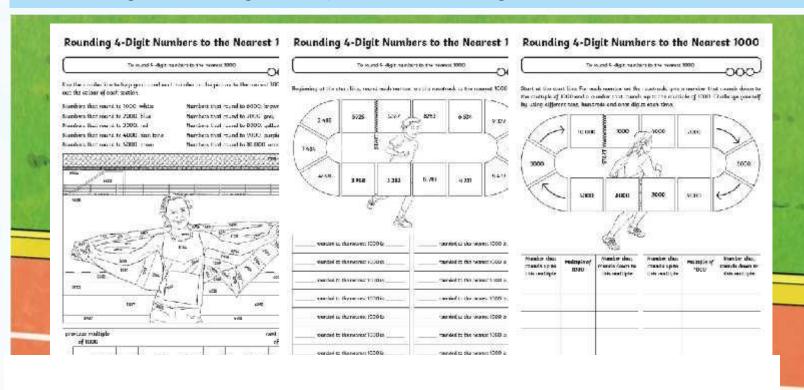




Rounding Races



Compete against another person to complete the lap around the track by answering each question correctly. Who will win the race?



Diving into Mastery



Dive in by completing your own activity!

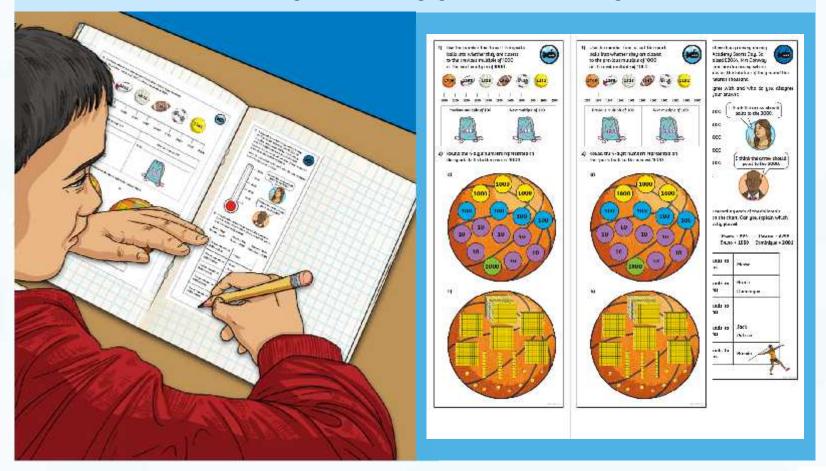
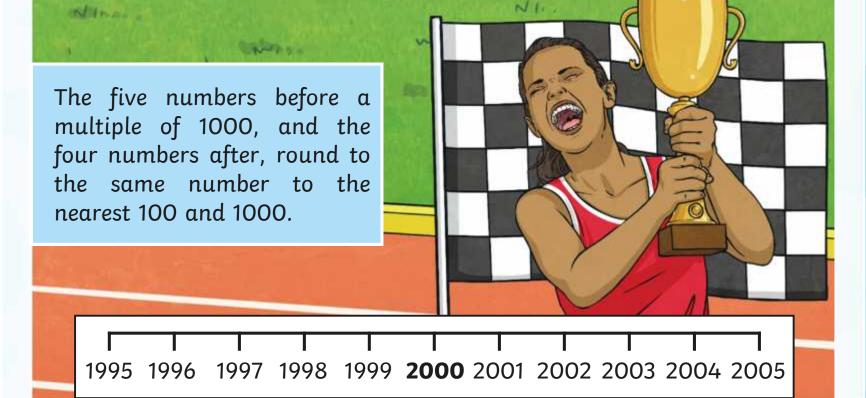


Photo Finish





Aim



• To round 4-digit numbers to the nearest 1000.

Success Criteria

- I can identify the multiples of 1000 that a 4-digit number is between.
- I can identify which digit to focus on in order to round to 1000.
- I can identify which digits round up and which digits round down.



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Aim: To round 4-digit numbers to the nearest 1000.					Date:				
					Delivered By:			Support:	
Success Criteria	Ме	Friend	Teacher	Т	PPA	s	I	AL	GP
I can identify the multiples of 1000 that a 4-digit number is between.				Notes/Evidence					
I can identify which digit to focus on in order to round to 1000.									
I can identify which digits round up and which digits round down.									
Next Steps				·					
J									
J									
		т	Teacher				I	Independent	
			Planning, Pre	paration	and Asses	sment		Adult Led	

Aim: To round 4-digit numbers to the nearest 1000.				Date:						
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Success Criteria	Ме	Friend	Teacher	т	PPA	s	I	AL	GP	
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Next Steps										
)										
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S Supply

GP Guided Practice

Independent

Teacher

Rounding 4-Digit Numbers to the Nearest 1000

To round 4-digit numbers to the nearest 1000.

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Use the numberline to help you round each number in the picture to the nearest 1000 to find out the colour of each section.

Numbers that round to 1000: white

Numbers that round to 2000: blue

Numbers that round to 3000: red

Numbers that round to 4000: skin tone

Numbers that round to 5000: green

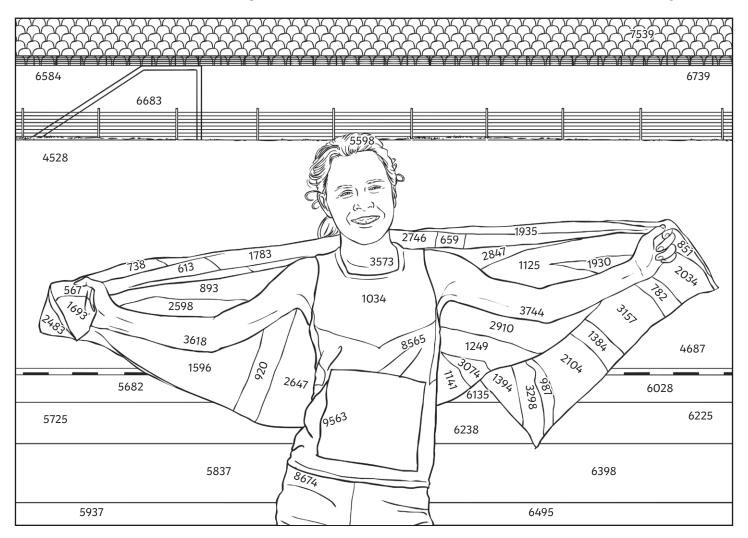
Numbers that round to 6000: brown

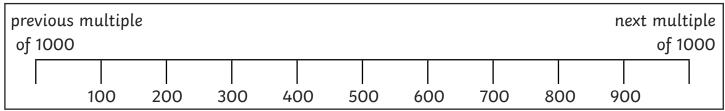
Numbers that round to 7000: grey

Numbers that round to 8000: yellow

Numbers that round to 9000: purple

Numbers that round to 10 000: orange

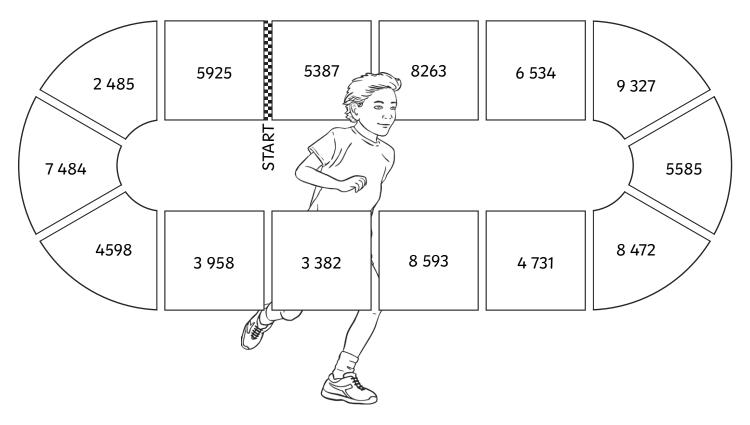




Rounding 4-Digit Numbers to the Nearest 1000

To round 4-digit numbers to the nearest 1000.

Beginning at the start line, round each number on the racetrack to the nearest 1000.



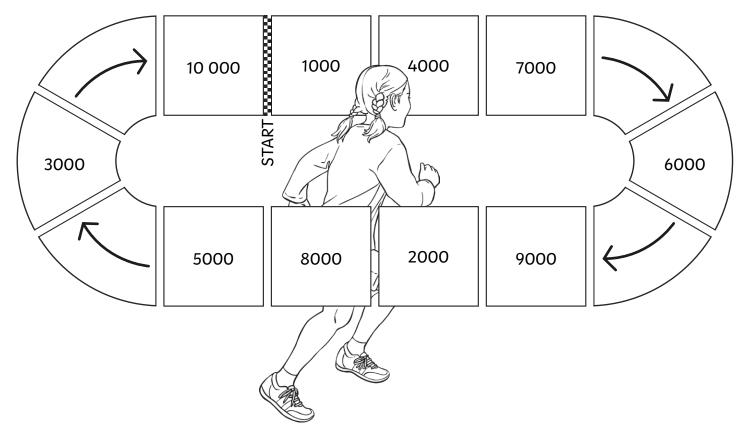
rounded to the nearest 1000 is	rounded to the nearest 1000 is
rounded to the nearest 1000 is	rounded to the nearest 1000 is
rounded to the nearest 1000 is	rounded to the nearest 1000 is
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rounded to the nearest 1000 is	rounded to the nearest 1000 is
rounded to the nearest 1000 is	rounded to the nearest 1000 is
rounded to the nearest 1000 is	rounded to the nearest 1000 is

Rounding 4-Digit Numbers to the Nearest 1000

To round 4-digit numbers to the nearest 1000.



Start at the start line. For each number on the racetrack, give a number that rounds down to the multiple of 1000 and a number that rounds up to the multiple of 1000. Challenge yourself by using different tens, hundreds and ones digits each time.



Number that rounds up to this multiple	Multiple of 1000	Number that rounds down to this multiple

Number that rounds up to this multiple	Multiple of 1000	Number that rounds down to this multiple

Rounding 4-Digit Numbers to the Nearest 1000 Answers

5387 rounded to the nearest 1000 is 5000.

8263 rounded to the nearest 1000 is 8000.

6534 rounded to the nearest 1000 is 7000.

9327 rounded to the nearest 1000 is 9000.

5585 rounded to the nearest 1000 is 6000.

8472 rounded to the nearest 1000 is 8000.

4371 rounded to the nearest 1000 is 4000.

8593 rounded to the nearest 1000 is 9000.

3382 rounded to the nearest 1000 is 3000.

3958 rounded to the nearest 1000 is 4000.

4598 rounded to the nearest 1000 is 5000.

7484 rounded to the nearest 1000 is 7000.

2485 rounded to the nearest 1000 is 2000.

5925 rounded to the nearest 1000 is 6000.

number that rounds up to this multiple	Multiple of 1000	Number that rounds down to this multiple
any number 500-1000	1000	any number 1000-1499
any number 1500-2000	2000	any number 2000-3499
any number 2500-3000	3000	any number 3000-3499
any number 3500-4000	4000	any number 4000-4499
any number 4500-5000	5000	any number 5000-5499

Number that rounds up to this multiple	Multiple of 1000	Number that rounds down to this multiple
any number 5500-6000	6000	any number 6000-6499
any number 6500-7000	7000	any number 7000-7499
any number 7500-8000	8000	any number 8000-9499
any number 8500-9000	9000	any number 9000-9499
any number 9500-10 000	10 000	any number 10 000-10 499

1) 1000 = 1255, 1419, 1181 2000 = 1705, 1828, 1563



2) 3471 round to 3000. 1539 rounds to 2000.

1) I disagree with Mrs Conway because she hasn't rounded correctly. She has rounded up when she should have rounded down. The hundreds place digit is a zero which means you round down and so the thousands digit doesn't change.



I agree with Mr Macfarlane because he has rounded correctly. 2064 is closer to 2000 than 3000 on the number line.

2) Jack's throw rounds to 3000 metres.
Brenda's throw rounds to 4000 metres.

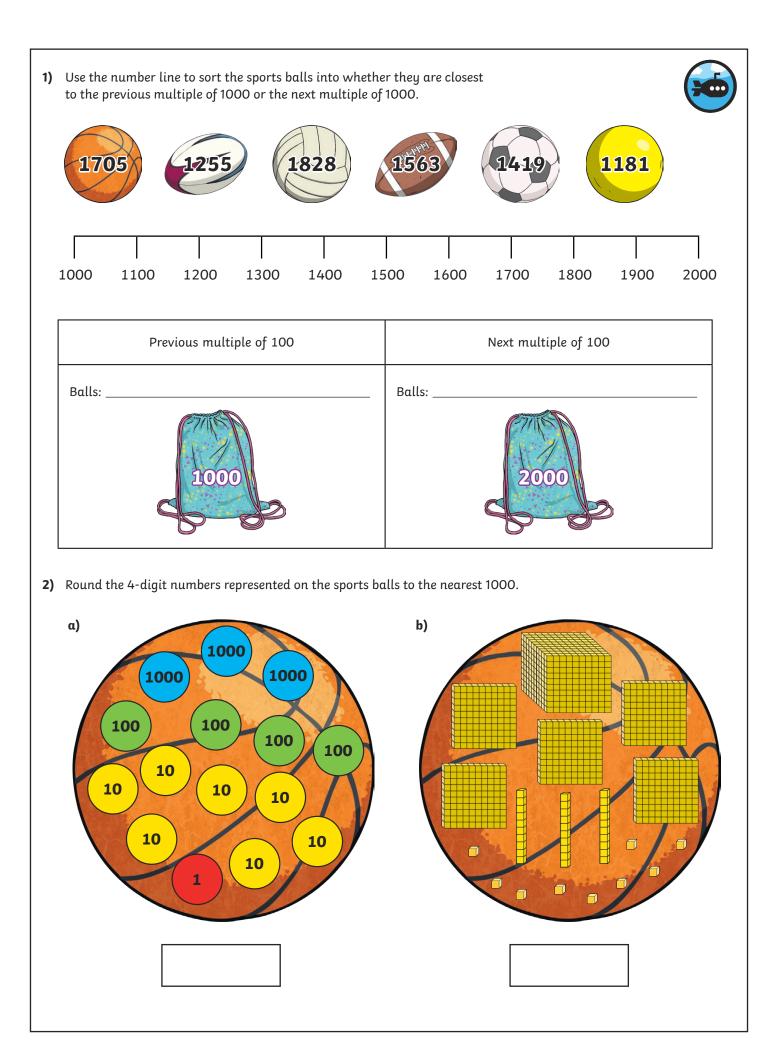
1) Red team = 4715

Green team = 7012

Yellow team = 1909

Blue team = 8046

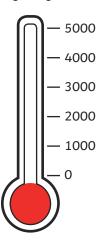




1) The pupils have been busy raising money for The Twinkl Academy Sports Day. So far, they have raised £2064. Mrs Conway and Mr Macfarlane are discussing where to place the arrow on the totalizer if they round the amount to the nearest thousand.



Who do you agree with and who do you disagree with? Explain your answer.







2) Mrs Johnston is recording each of the children's javelin throws on the chart. Can you explain which ones are incorrectly placed?

Jack = **3045**

Maeve = **994**

Patrice = **3999**

Brenda = **4470**

Bruno = **1550**

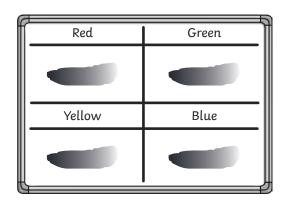
Dominique = 2001

Throw rounds to 1000 metres	Mαeve
Throw rounds to 2000 metres	Bruno Dominique
Throw rounds to 3000 metres	
Throw rounds to 4000 metres	Jack Patrice
Throw rounds to 5000 metres	Brenda



1) The rain has washed away the sports day scoreboard. Every team's score was a 4-digit number. Use the clues to discover the number of points each team has scored.





	_	_	
Red	Team	Score.	

- rounds up to 5000 when rounded to the nearest thousand
- · has 7 hundreds
- is a multiple of 5
- digits add up to 17

Yellow Team Score: _____

- rounds up to 2000 when rounded to the nearest thousand
- · has 0 tens
- · digits add up to 19
- is an odd number

Green Team Score: _____

- rounds down to 7000 when rounded to the nearest thousand
- has 0 hundreds
- digits add up to 10
- is an even number but not a multiple of 5

Blue Team Score: _____

- rounds down to 8000 when rounded to the nearest thousand
- · has 4 tens
- has 0 hundreds
- digits add up to 18
- 2) The teacher team also compete. Choose how many points they score. Write rounding and place value clues for a friend to see if they can solve your clues.

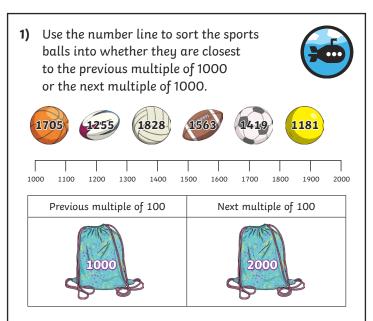
Clue 1: _____

Clue 2:

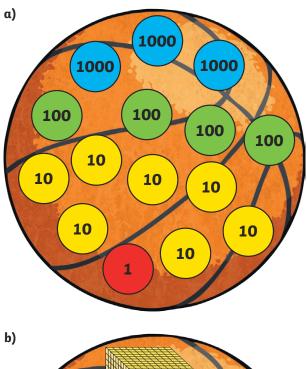
Clue 3: _____

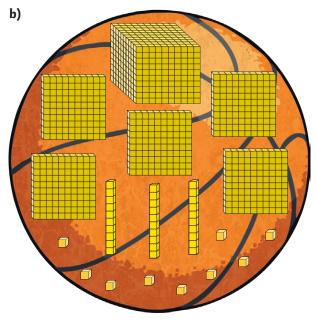
Clue 4: _____

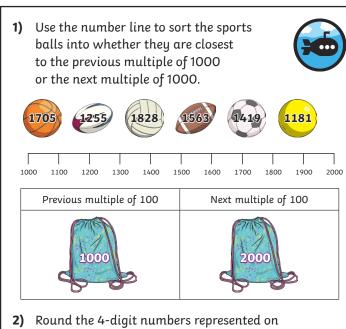




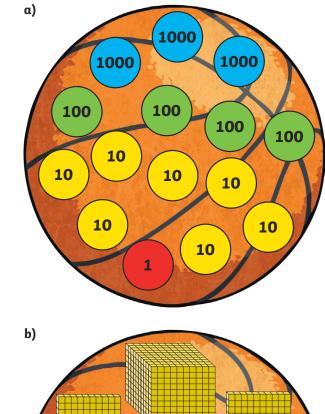
2) Round the 4-digit numbers represented on the sports balls to the nearest 1000.

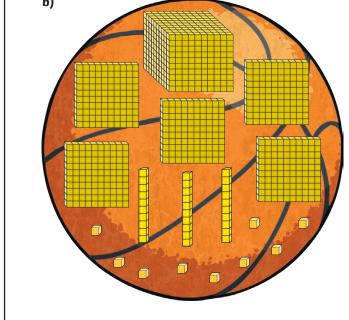






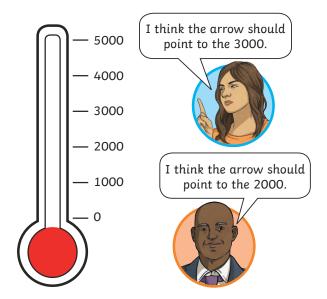
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for The Twinkl Academy Sports Day. So far, they have raised £2064. Mrs Conway and Mr Macfarlane are discussing where to place the arrow on the totalizer if they round the amount to the nearest thousand.

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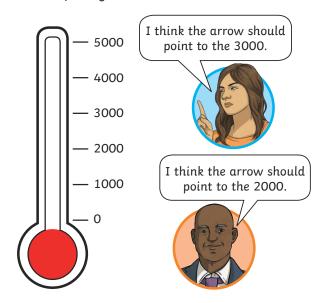
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Throw rounds to 3000 metres	
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Yellow	Blue

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To round 4-digit numbers to the nearest 1000.	To round 4-digit numbers to the nearest 1000.	
I can identify the multiples of 1000 that a 4-digit number is between.	I can identify the multiples of 1000 that a 4-digit number is between.	
I can identify which digit to focus on in order to round to 1000.	I can identify which digit to focus on in order to round to 1000.	
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Number and Place Value Rounding 4-digit Numbers to 1000	Number and Place Value Rounding 4-digit Numbers to 10	000
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Number and Place Value Rounding 4-digit Numbers to 1000	Number and Place Value Rounding 4-digit Numbers to 10	000
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