

Hello year 5,

We hope you have all had a lovely Easter break and have enjoyed the glorious sunshine that we have been having, despite these challenging times.

This week your home learning is in the same format as before Easter. Remember you can complete the tasks in any order but must start with Monday's work and then Tuesday's work and so on. All the answers are provided at the back of the presentation so you can self-mark (no cheating though!) Please try and work as neatly as you can and as hard as you would as if you were at school.

We hope that you're all continuing to keep safe and well during this challenging time and we are counting down the days until we will see you all again.

Take care and look after yourselves,
Miss Savage and Mrs Montgomery



Remember to read at home!

You should be aiming to read for at least 20 minutes every day.

Remember, you can now take Accelerated Reader quizzes from home by using this link [Howley Grange Renaissance at home](#) and logging on as usual using your username and password.

To check that the book you are reading has a quiz, you can check it using on [Accelerated Reader Bookfinder](#). It's okay to read books which haven't got a quiz - just keep a record of what you have read.

Keep reading and exploring new worlds and adventures!

MATHS

20/04/20

WALT: multiply 4 digit numbers by one or two digit numbers using a formal written method.

Long Multiplication Method

Complete the following calculation:

multiplicand


$$4533 \times 54$$



multiplier

Go onto the next slide to see the multiplication process for this calculation.

1. Multiply the number in the ones column by the ones multiplier and carry the tens over to the tens column.

TTh	Th	H	T	O
	4	5	3	3
		×	5	4
<hr/>				
				2
			1	

2. Multiply the number in the tens column by the ones multiplier and carry over the hundreds to the hundreds column. Remember to add on the tens that were carried over.

TTh	Th	H	T	O
	4	5	3	3
		×	5	4
<hr/>				
			3	2
		1	1	

3. Multiply the number in the hundreds column with the ones multiplier and carry the thousands over to the thousands column. Remember to add on the hundreds that were carried over.

TTh	Th	H	T	O
	4	5	3	3
		×	5	4
<hr/>				
		1	3	2
	2	1	1	

4. Multiply the number in the thousands column with the ones multiplier and carry the ten thousands over to the ten thousands column. Remember to add on the thousands that were carried over.

TTh	Th	H	T	O
	4	5	3	3
		×	5	4
<hr/>				
1	8	1	3	2
	2	1	1	

5. Add the magic zero.

$$\begin{array}{r} \text{TTh} \quad \text{Th} \quad \text{H} \quad \text{T} \quad \text{O} \\ 4 \quad 5 \quad 3 \quad 3 \\ \times \quad 5 \quad 4 \\ \hline 1 \quad 8 \quad 1 \quad 3 \quad 2 \\ \quad \quad 2 \quad 1 \quad 1 \\ \quad \quad \quad \quad 0 \end{array}$$

6. Multiply the number in the ones column by the tens multiplier and carry the hundreds over to the hundreds column.

TTh	Th	H	T	O
	4	5	3	3
		×	5	4
1	8	1	3	2
	2	1	1	
		1	5	0
		1		

7. Multiply the number in the tens column by the tens multiplier and carry over the thousands to the thousands column. Remember to add on the hundreds that were carried over.

TTh	Th	H	T	O
	4	5	3	3
		×	5	4
1	8	1	3	2
	2	1	1	
		6	5	0
	1	1		

8. Multiply the number in the hundreds column with the tens multiplier and carry the ten thousands over to the ten thousands column. Remember to add on the thousands that were carried over.

TTh	Th	H	T	O
	4	5	3	3
		×	5	4
1	8	1	3	2
	2	1	1	
	6	6	5	0
2	1	1		

9. Multiply the number in the thousands column with the tens multiplier and carry the hundred thousands over to the hundred thousands column. Remember to add on the ten thousands that were carried over.

HTh	TTh	Th	H	T	O
		4	5	3	3
			×	5	4
	1	8	1	3	2
		<small>2</small>	<small>1</small>	<small>1</small>	
2	2	6	6	5	0
	<small>2</small>	<small>1</small>	<small>1</small>		

10. Use column addition to add together the answers.

	HTh	TTh	Th	H	T	O
			4	5	3	3
				×	5	4
	<hr/>					
		1	8	1	3	2
			²	¹	¹	
+	2	2	6	6	5	0
	<hr/>					
	2	4	4	7	8	2
		²	¹	¹		
		1				

YOUR TASK

Choose either the one, two or three star and have a go at answering the questions.



Multiplying 3-Digit Numbers by 1-Digit Numbers

$$\begin{array}{r} 281 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 463 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 696 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 416 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 275 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 643 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 867 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 891 \\ \times 4 \\ \hline \end{array}$$



Long Multiplication Practice

- 3 Digits x 2 Digits

1.

		1	6	1
x			2	3
<hr/>				
<hr/>				

2.

		2	3	2
x			2	6
<hr/>				
<hr/>				

3.

		6	1	4
x			1	8
<hr/>				
<hr/>				

4.

		9	6	9
x			9	5
<hr/>				
<hr/>				

5.

		7	4	0
x			9	6
<hr/>				
<hr/>				

6.

		3	6	2
x			5	8
<hr/>				
<hr/>				

7.

		3	0	5
x			7	1
<hr/>				
<hr/>				

8.

		3	7	0
x			6	4
<hr/>				
<hr/>				



- 1) Helena has answered some calculations using long multiplication but she has not recorded her working out.

Tick the correct answers and cross the incorrect ones.

For each incorrect answer, explain the mistake she has made. To help with this, you may want to use some squared paper to work out each calculation yourself.

a) $4520 \times 35 = 36\ 160$	<hr/> <hr/> <hr/> <input type="checkbox"/>
b) $7648 \times 27 = 206\ 496$	<hr/> <hr/> <hr/> <input type="checkbox"/>
c) $2112 \times 18 = 38\ 006$	<hr/> <hr/> <hr/> <input type="checkbox"/>



Long Multiplication Practice – 4 Digits x 2 Digits

1.

		2	1	9	0
x				6	9
<hr/>					
<hr/>					

2.

		1	3	4	2
x				5	2
<hr/>					
<hr/>					

3.

		1	5	2	1
x				7	3
<hr/>					
<hr/>					

4.

		1	1	4	3
x				3	4
<hr/>					
<hr/>					

5.

		2	4	6	8
x				2	7
<hr/>					
<hr/>					

6.

		1	8	9	5
x				4	6
<hr/>					
<hr/>					



1) Identify the missing digits in these calculations.

	2		2	
x			3	2
<hr/>				
	4		5	4
7		8	1	0
<hr/>				
	7	6		4

		4		5	3
	x				6
<hr/>					
		7			8
1	8		1	2	0
<hr/>					
2		4	0		8

2) Carrie has created a calculation using digit cards but her cat has knocked the digit cards out of place. Can you put each digit card back in the right place to create Carrie's calculation?

6	3	4	2	3	5
---	---	---	---	---	---

x					
<hr/>					
	1	9	5	2	4
<hr/>					
	9	7	6	2	0
<hr/>					
1	1	7	1	4	4

ENGLISH

20/04/20

WALT: Read, reflect on and create a performance for the poem 'I am a writer'.

YOUR TASK

1. Read the poem: 'I am a writer'.

Read it in your head first and then try reading it out loud. What rhythms and patterns can you hear when you read it aloud? Choose your favourite three images from the poem. Why do you like these images in particular?

2. Reflect on the poem.

Read the '**Reflection Prompts**' and think about your answers for each. Write a reflection on the poem, by writing some of your answers as sentences.

3. Prepare a performance.

Watch the poet Joseph Coelho talk about how to perform a poem using:

[https://www.bbc.co.uk/teach/class-clips-video/english-ks1-ks2-](https://www.bbc.co.uk/teach/class-clips-video/english-ks1-ks2-understandingpoetry/zdwxbdm)

[understandingpoetry/zdwxbdm](https://www.bbc.co.uk/teach/class-clips-video/english-ks1-ks2-understandingpoetry/zdwxbdm). This is really brilliant - you may want to watch it more than once! Make notes about Joseph Coelho's tips. Practise a performance of 'I am a writer'.

I am a writer

Joseph Coelho

I am the clash and collide of the stars
because I create worlds.

I am the awareness of the trees
because I hear the wind.

I am the sweat of a rainbow
because I refract all the colours.

I am the blood in a pen
because I ink arteries.

I am the blade in a sharpener
because I make nibs vanish.

I am the edge of a rubber,
rounded, worn and softened by mistakes.

I am the conversation of notes,
discussing melodies.

I am the holes in a flute,
knower of unknown tunes.

I am the skin of a drum.
Every hit, beat and bang
bouncing off me,
forming music from nothing.

Reflection Prompts

Read the questions and think about your answers to them.

What is the poem
about?

What is the **tone** of the poems?

*Is it serious, or funny or
thoughtful?*

Does it **remind** you of anything
or anyone?

*How are they similar?
How are they different?*

Who do you think this
poem is written for?

*Can you explain why you
think this?*

Can you guess anything
about **the poet** from reading
this poem?

What can you guess?

Do you **like** this poem?
*What do you like about this
poem?*

*Is there anything that you
dislike about it?*

SCIENCE

20/04/20

Q: What are thermal conductors and insulators?

Includes resources from [twinkl.co.uk](https://www.twinkl.co.uk).

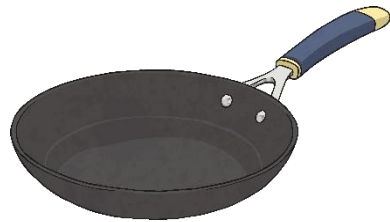
Thermal Conductors and Insulators

Thermal Conductors

Heat can travel easily through thermal conductors.

Metals are good thermal conductors, as they allow heat to move through them.

Thermal conductors are used to make items that need heat to travel through them, like a pan or a radiator.



Did you know?

Thermal Insulators

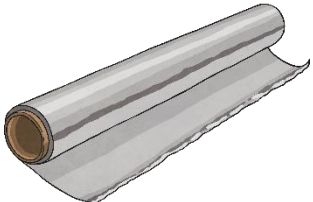
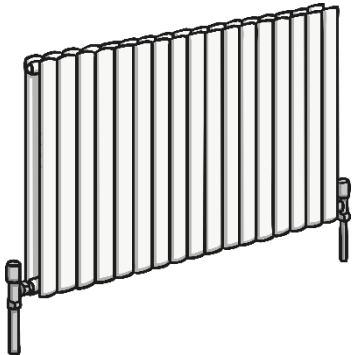
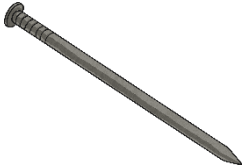
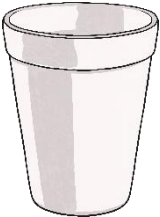
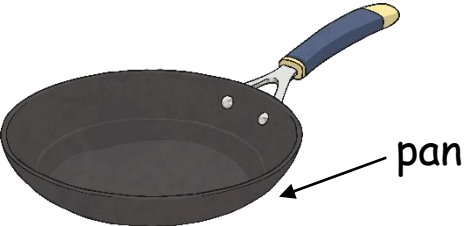
Thermal insulators do not let heat travel through them easily.

Some fabrics, wood and plastics are good thermal insulators.

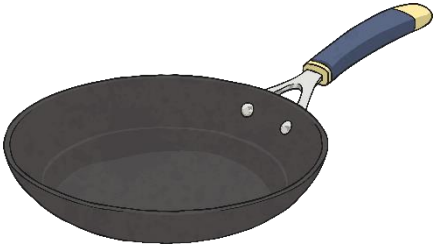
Thermal insulators can keep heat out or in. For example, a vacuum flask stops heat from the air travelling through to the food or drink inside, keeping it cool. A coat stops the heat from your body travelling through to the air outside, keeping you warm.

Heat always travels from a warmer area to a cooler one.

Can you sort these materials into thermal conductors and insulators?



pan handle



Write out the answers to the following questions about thermal conductors and insulators.

1. Thermal conductors allow _____ to move through them.
 - a. water
 - b. heat
 - c. air
2. Plastic is a good thermal conductor. True or false?
3. Which of these sentences is true?
 - a. Heat always travels to a warmer place.
 - b. Heat does not travel; it stays in one place.
 - c. Heat always travels from a warmer place to a cooler one.
4. Why is a scarf a good thermal insulator?

Write out the answers to the following questions about thermal conductors and insulators.

5. A wooden spoon is an example of a:

a. thermal conductor

b. thermal insulator

Explain your answer.

6. Metals are good thermal conductors. True or false?

If you want to try an experiment for yourself:

Will a snowman melt faster with or without a coat on? Use what you know about thermal conductors and insulators to make a prediction, then test it by wrapping ice cubes in 'coats' made of different materials that you can find around your house. What do you find out?

Answers

MATHS: 20.04.20



$$\begin{array}{r} 281 \\ \times 5 \\ \hline 1405 \end{array}$$

$$\begin{array}{r} 463 \\ \times 4 \\ \hline 1852 \end{array}$$

$$\begin{array}{r} 696 \\ \times 4 \\ \hline 2784 \end{array}$$

$$\begin{array}{r} 416 \\ \times 4 \\ \hline 1664 \end{array}$$

$$\begin{array}{r} 275 \\ \times 6 \\ \hline 1650 \end{array}$$

$$\begin{array}{r} 643 \\ \times 6 \\ \hline 3858 \end{array}$$

$$\begin{array}{r} 867 \\ \times 5 \\ \hline 4335 \end{array}$$

$$\begin{array}{r} 891 \\ \times 4 \\ \hline 3564 \end{array}$$



1.

		1	6	1
x			2	3
		4	8	3
	3	2	2	0
	3	7	0	3

2.

		2	3	2	
x			2	6	
		1	3	9	2
	4	6	4	0	
	6	0	3	2	

3.

		6	1	4	
x			1	8	
		4	9	1	2
	6	1	4	0	
	1	1	0	5	2

4.

		9	6	9	
x			9	5	
		4	8	4	5
	8	7	2	1	0
	9	2	0	5	5

5.

		7	4	0	
x			9	6	
		4	4	4	0
	6	6	6	0	0
	7	1	0	4	0

6.

		3	6	2	
x			5	8	
		2	8	9	6
	1	8	1	0	0
	2	0	9	9	6

7.

		3	0	5	
x			7	1	
		3	0	5	
	2	1	3	5	0
	2	1	6	5	5

8.

		3	7	0	
x			6	4	
		1	4	8	0
	2	2	2	0	0
	2	3	6	8	0

a) $4520 \times 35 = 36\ 160$	<p>The correct answer is 158 200. Helena has not put the zero placeholder in when calculating 4520×30, $20 \times 30 = 600$ and not 60.</p> <table border="1"> <tr><td></td><td></td><td>4</td><td>5</td><td>2</td><td>0</td></tr> <tr><td>x</td><td></td><td></td><td>3</td><td>5</td></tr> <tr><td></td><td>2</td><td>2</td><td>6</td><td>0</td><td>0</td></tr> <tr><td></td><td>1</td><td>3</td><td>5</td><td>6</td><td>0</td><td>0</td></tr> <tr><td></td><td>1</td><td>5</td><td>8</td><td>2</td><td>0</td><td>0</td></tr> </table>			4	5	2	0	x			3	5		2	2	6	0	0		1	3	5	6	0	0		1	5	8	2	0	0	X
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b) $7648 \times 27 = 206\ 496$		✓																															
c) $2112 \times 18 = 38\ 006$	<p>The correct answer is 38 016. Helena has not recorded the regrouped ten from $2 \times 8 = 16$.</p> <table border="1"> <tr><td></td><td></td><td>2</td><td>1</td><td>1</td><td>2</td></tr> <tr><td>x</td><td></td><td></td><td>1</td><td>8</td></tr> <tr><td></td><td>1</td><td>6</td><td>8</td><td>8</td><td>6</td></tr> <tr><td></td><td>2</td><td>1</td><td>1</td><td>2</td><td>0</td></tr> <tr><td></td><td>3</td><td>8</td><td>0</td><td>1</td><td>6</td></tr> </table>			2	1	1	2	x			1	8		1	6	8	8	6		2	1	1	2	0		3	8	0	1	6	X		
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MATHS: 20.04.20



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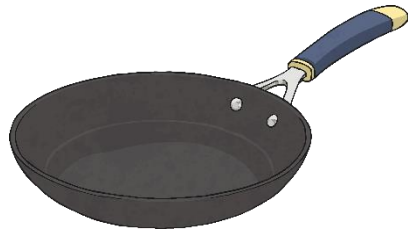
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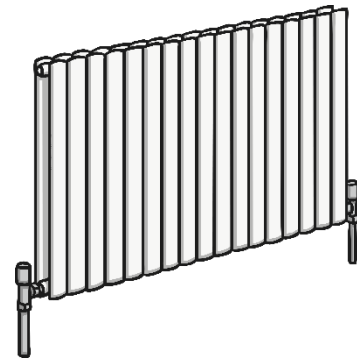
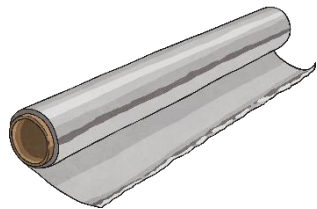
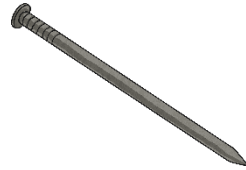
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SCIENCE: 20.04.20

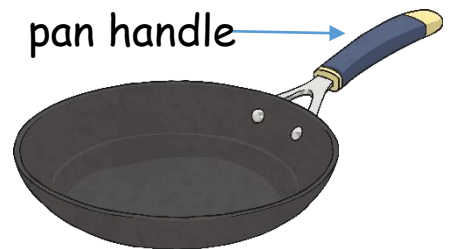
Thermal Conductors



↑
pan



Thermal Insulators



SCIENCE: 20.04.20

1. Choose the correct word to complete this sentence.

Thermal conductors allow heat to move through them.

2. Plastic is a good thermal conductor. **False**

Plastic is a good thermal **insulator** as it does not allow heat to pass through it. The handles of saucepans are often made from plastic to protect your hand from the heat.

3. Which of these sentences is true? **c. Heat always travels from a warmer place to a cooler one.**

A hot cup of tea left in a cold place will lose heat until it is the same temperature as its surroundings.

SCIENCE: 20.04.20

4. Why is a scarf a good thermal insulator? **A scarf is a good thermal insulator because it stops the heat from your body escaping into the cold air.**
5. A wooden spoon is an example of a:

thermal insulator

A wooden spoon is an example of a thermal insulator. Wood does not allow heat to travel through it. Wooden spoons are used in cooking so that you do not burn your hand.

6. Metals are good thermal conductors. **True**

Metals are very good thermal conductors. We use metals such as steel and aluminium to make objects that need to heat up quickly. For example, saucepans are made of metal so that we can heat and cook food effectively.