



Orchard Head Year 6: Home Learning Schedule

W/C 29 th June	Monday	Tuesday	Wednesday	Thursday	Friday
Maths	Lesson 1: Area & perimeter	Lesson 2: Area of triangles	Lesson 3: Area of parallelograms	Lesson 4: Volume of cuboids	Lesson 5: Volume of cubes and cuboids
<i>Suggested timing: 45 mins per lesson</i>	In this lesson, you will learn how to calculate the area and perimeter of rectilinear shapes. <i>Click here to find task sheets to support your learning.</i>	In this lesson, you will use formulae to calculate the area of a triangle. <i>Click here to find task sheets to support your learning.</i> <i>Click here for a tutorial.</i>	In this lesson, you will use formulae to calculate the area of a parallelogram. <i>Click here to find task sheets to support your learning.</i> <i>Click here for a tutorial.</i>	In this lesson, you will learn how to calculate the volume of cuboids. <i>Click here to find task sheets to support your learning.</i> <i>Click here for a tutorial.</i>	In this lesson, you will learn how to calculate the volume of cubes and cuboids. <i>Click here to find task sheets to support your learning.</i> <i>Click here for a tutorial.</i>
This week we will be focussing upon: Measures: Perimeter, Area & Volume We have produced a 'pre-teach' video to introduce this week's learning in maths. We recommend watching the video before commencing Lesson 1. Please click here to view this.					



Remember to log in to TT Rockstars each week to practise your times tables. There will also be a Friday Arithmetic and Maths [Challenge](#).



Remember to share your learning on ClassDojo!



Take a photo of your work and upload it to the Portfolio section for your teacher to see.

English	Lesson 1: Setting Description - Reading Comprehension	Lesson 2: Setting Description - Reading Comprehension	Lesson 3: Setting Description - Identifying Key Features	Lesson 4: Setting Description - Figurative language (Vocabulary focus)	Lesson 5: Writing a setting description
<i>Suggested timing: 45 mins per lesson</i>	In this lesson, you will make inferences and justify your answers with evidence from the text. <i>Click here to find slideshows, videos and task sheets to support your learning.</i>	In this lesson, you will make inferences and justify your answers with evidence from the text. <i>Click here to find slideshows, videos and task sheets to support your learning.</i>	In this lesson, you will learn how to identify the key features of a setting description. <i>Click here to find slideshows, videos and task sheets to support your learning.</i>	In this lesson, you will practise using figurative language to paint an image in the reader's mind. <i>Click here to find slideshows, videos and task sheets to support your learning.</i>	In this lesson, you will apply your understanding from throughout the week to write your own setting description. <i>Click here to find slideshows, videos and task sheets to support your learning.</i>
This week our text type is: A Setting Description We have produced a 'pre-teach' video to introduce this week's learning in English. We recommend watching the video before commencing Lesson 1. Please click here to view this.					

This week's spellings are: official – artificial – initial – confidential – special – financial – essential – partial



Having any problems with the tasks? *Feel free to pop any questions or issues onto our class padlet [here!](#)*



Don't forget to join us every afternoon, Monday to Friday, at 2pm. Click [here](#) to take part in a live discussion on Microsoft Teams about the day's learning alongside your classmates and teacher.



Maths– Lesson 1: Challenge 1

1 Use the words to complete the sentences.

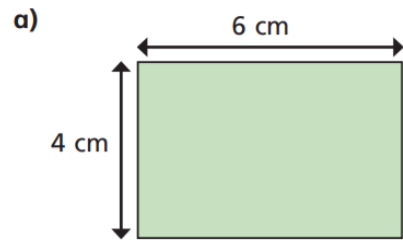
perimeter cm^2 cm m

area m^2 inside around

_____ is the amount of space _____ a two-dimensional shape. It can be measured in units such as _____ or _____

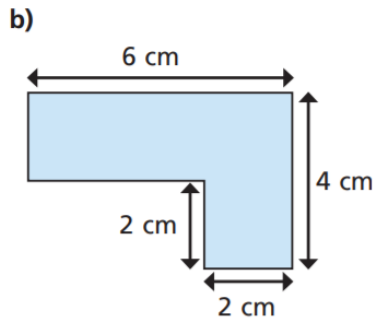
_____ is the distance _____ a two-dimensional shape. It can be measured in units such as _____ or _____

2 Work out the areas and perimeters of the shapes.



perimeter = cm

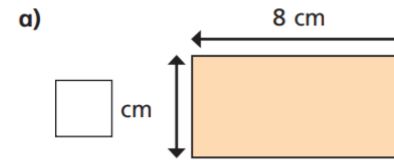
area = cm^2



perimeter = cm

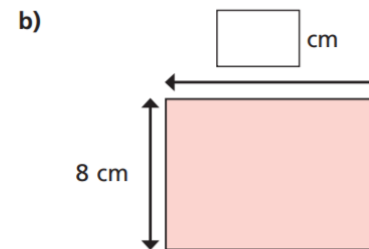
area = cm^2

3 Work out the missing values.



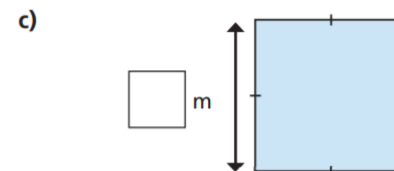
area = 32 cm^2

perimeter = cm



area = cm^2

perimeter = 40 cm

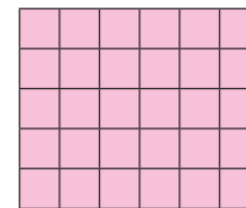


area = m^2

perimeter = 36 m

4 Work out the areas and perimeters of the shapes.

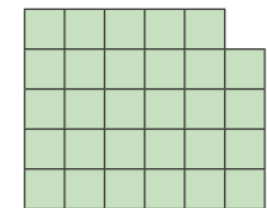
Shape A



area = cm^2

perimeter = cm

Shape B



area = cm^2

perimeter = cm

What do you notice?





5



Tommy

If you start with a rectilinear shape, when you increase the area, the perimeter will increase.

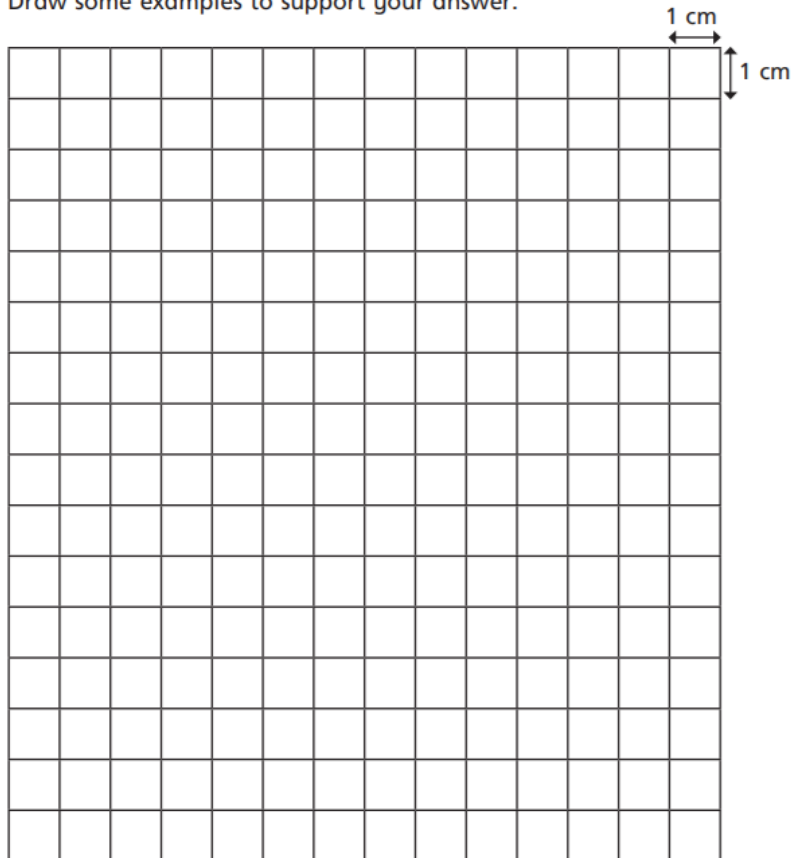
Amir



It depends on the shape.

Who do you agree with? _____

Draw some examples to support your answer.

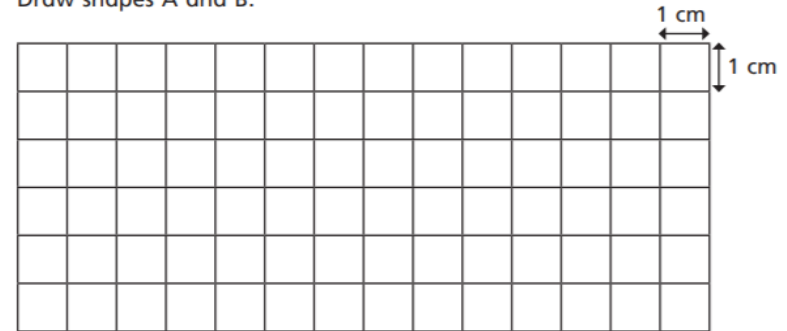


6

Two rectilinear shapes, A and B, each have an area of 12 squares.

- Shape A has the largest perimeter possible.
- Shape B has the smallest perimeter possible.

Draw shapes A and B.



What do you notice?

7

Mr Jones has 50 m of fencing.

He wants to make a rectilinear enclosure using all the fencing.

a) Draw an example of a shape he could make. Give units on your diagram.



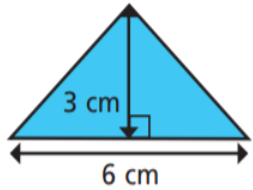
b) What is the greatest possible area of the enclosure?

c) What is the smallest possible area of the enclosure?



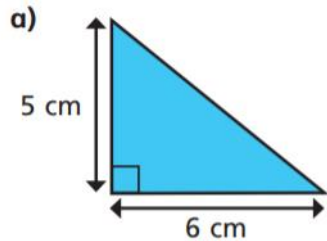
Maths– Lesson 2: Challenge 1

- 1 Calculate the area of the triangle.

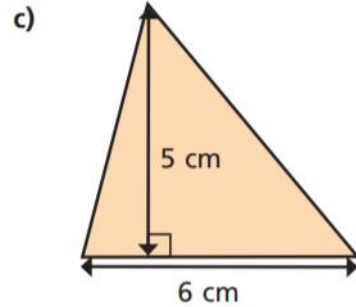


area = cm²

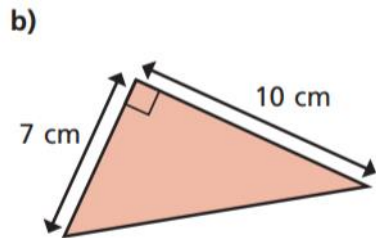
- 2 Calculate the area of the triangles.



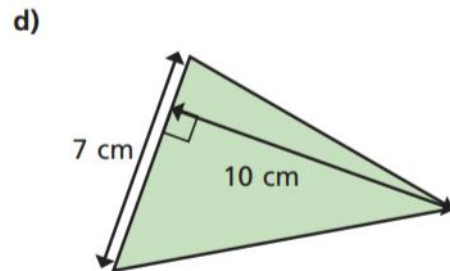
area = cm²



area = cm²

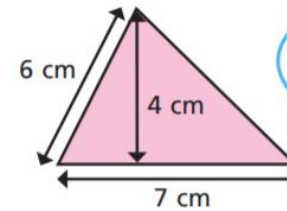


area = cm²



area = cm²

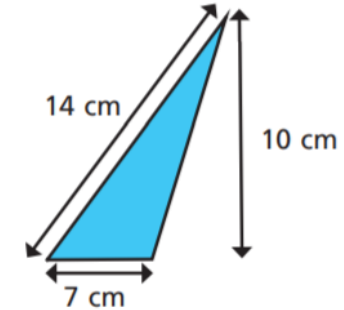
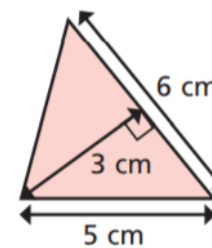
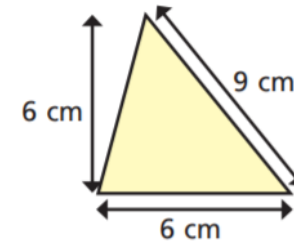
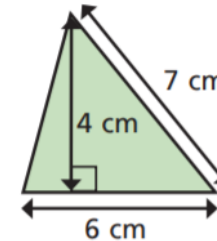
- 3 What mistake has Dora made?



To find the area you do
 $7 \times 6 \div 2 = 21 \text{ cm}^2$



- 4 Label the base of each triangle *b*.
Label the perpendicular height *h*.



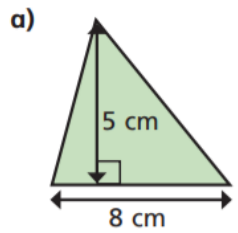
- 5 Are the statements always, sometimes or never true?

The side at the bottom of a triangle is the base.

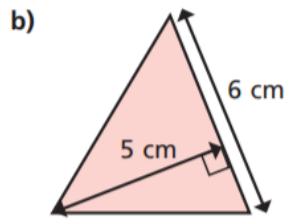
The perpendicular height is equal to the vertical height.



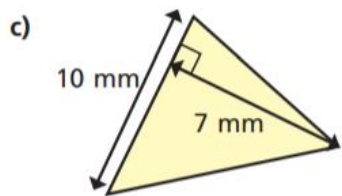
6 Calculate the area of the triangles.



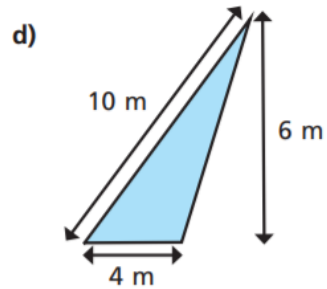
area = cm²



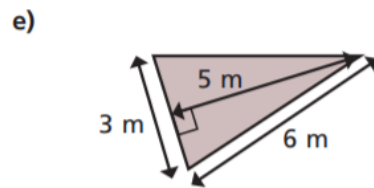
area = cm²



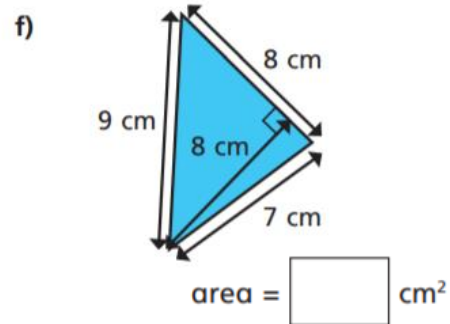
area = mm²



area = m²

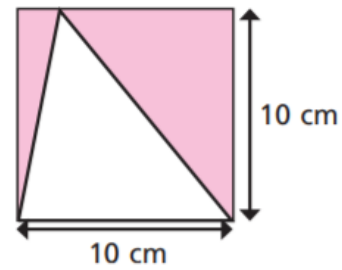


area = m²



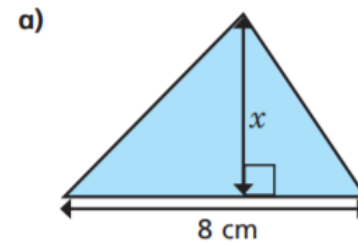
area = cm²

7 Find the area of the shaded region.

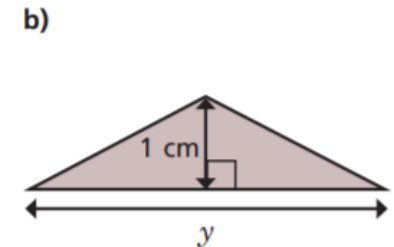


area = cm²

8 The area of each triangle is 12 cm². Find the missing lengths.

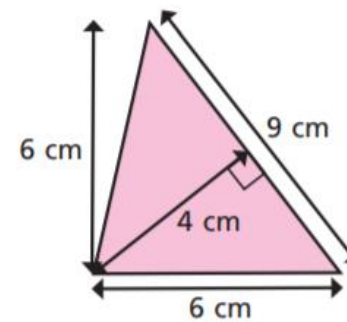


$x =$ cm



$y =$ cm

9 Show two ways you can work out the area of the triangle.

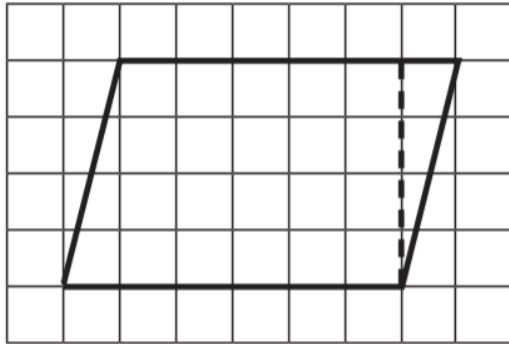


Compare answers with a partner.



Maths— Lesson 3: Challenge 1

- 1 On a piece of squared paper, copy this parallelogram and cut it out.

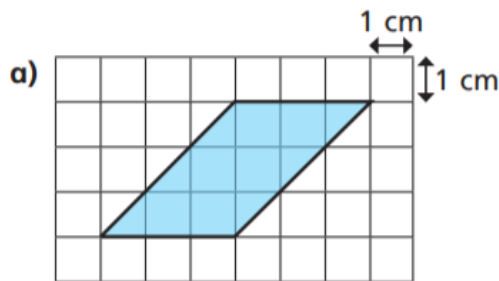


- a) Create a rectangle by cutting off the right-angled triangle and moving it.
b) Complete the sentences.

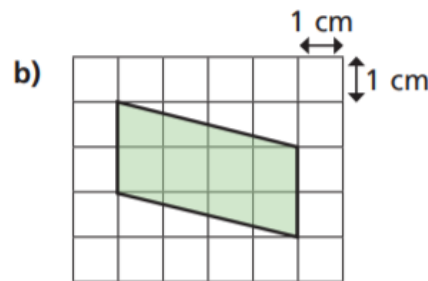
The area of the rectangle is squares.

The area of the parallelogram is squares.

- 2 Calculate the areas of the parallelograms.

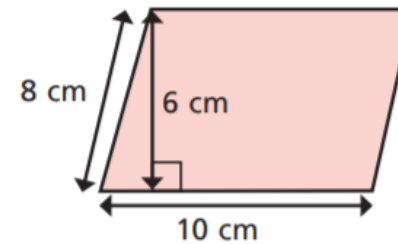


area = cm²



area = cm²

- 3 Huan is finding the area of the parallelogram.



$$10 \times 8 = 80 \text{ cm}^2$$

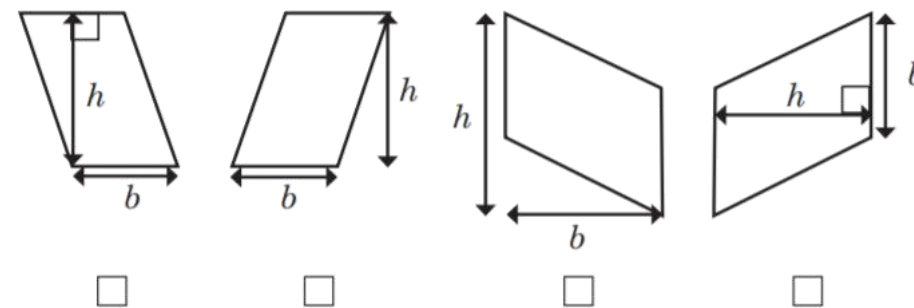
- a) What mistake has Huan made?

- b) What is the correct answer?

area = cm²

- 4 Esther has labelled the bases and heights for four parallelograms.

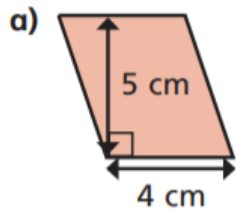
Three are correct; one is incorrect. Tick the shapes that have been correctly labelled.



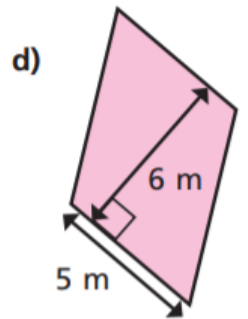
Explain to a partner why one is incorrect.



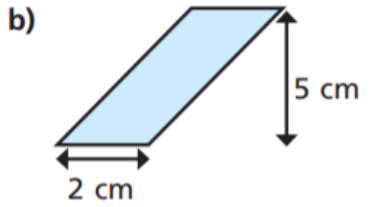
5 Calculate the areas of the parallelograms.



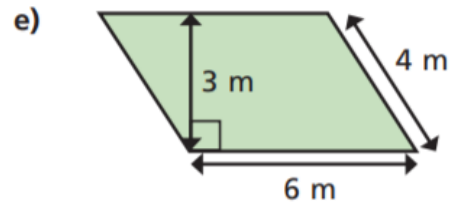
area = cm²



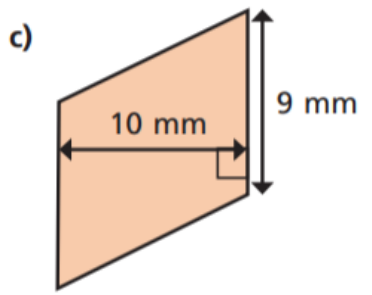
area = m²



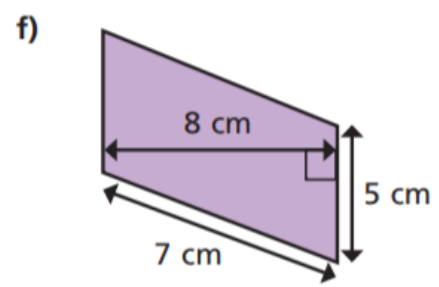
area = cm²



area = m²

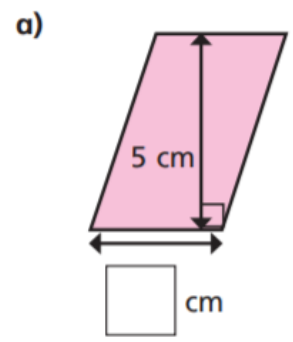


area = mm²

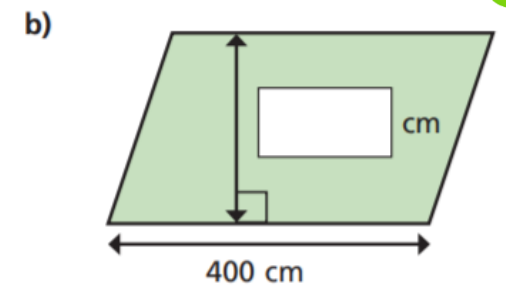


area = cm²

6 Find the missing lengths.

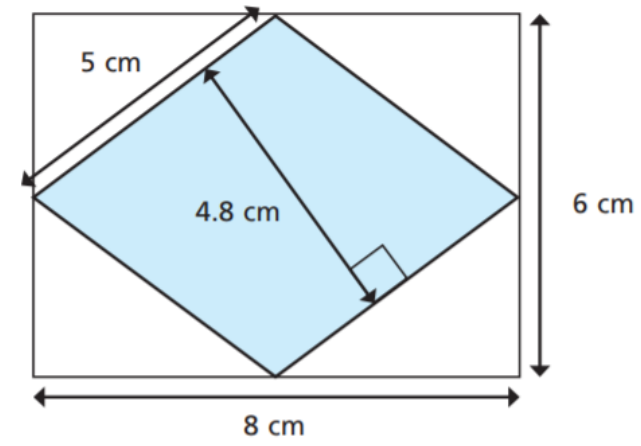


area = 15 cm²



area = 12 m²

7 Here is a rhombus inside a rectangle.



a) Calculate the area of the rhombus.

area = cm²

b)

The area of the rhombus is half the area of the rectangle. This means that it is a special triangle.

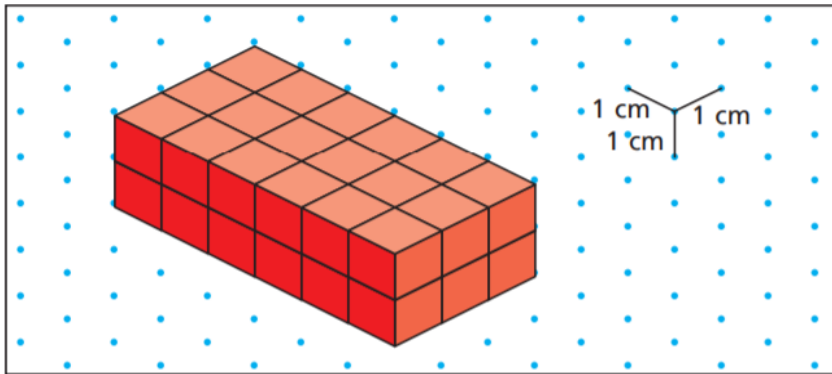


Explain to a partner why Mo is wrong.



Maths– Lesson 4: Challenge 1

1 Here is a cuboid made up of cubes.

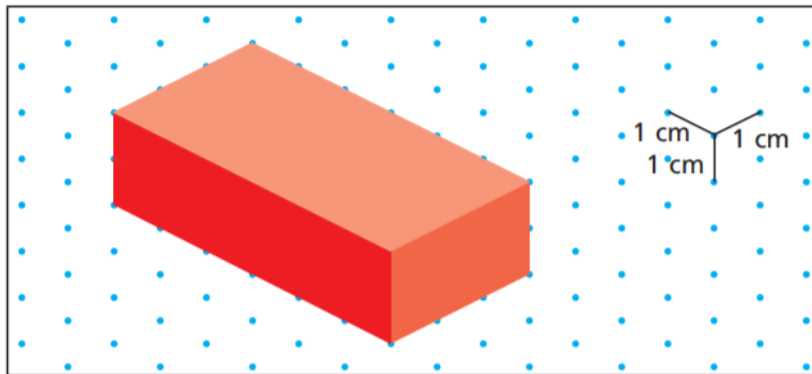


a) What is the volume of the cuboid?

volume = cm³

b) Explain your method for finding the volume.

c) What is the volume of this cuboid?

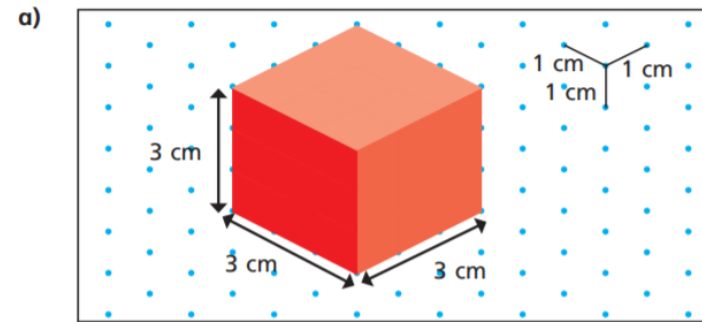


volume = cm³

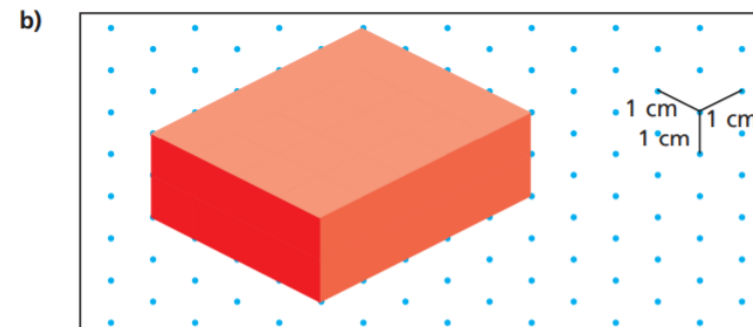
d) What is the same and what is different about the cuboids?

2 Find the volume of the cuboids.

You can make them with cubes if it helps.

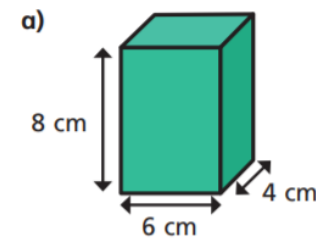


volume = cm³

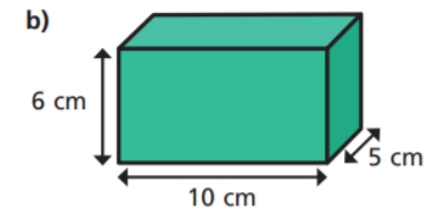


volume = cm³

3 Calculate the volumes of the cuboids.



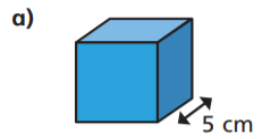
volume = cm³



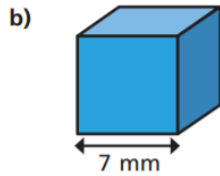
volume = cm³



4 Calculate the volumes of the cubes.

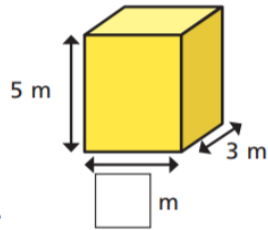


volume = cm^3

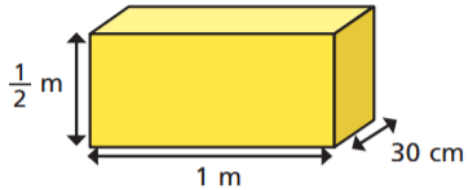


volume = mm^3

5 The volume of the cuboid is 60 m^3
Find the missing length.

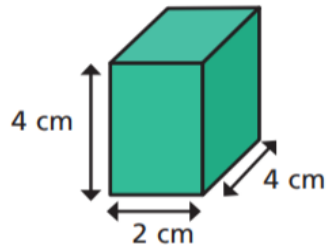


6 Calculate the volume of the cuboid.

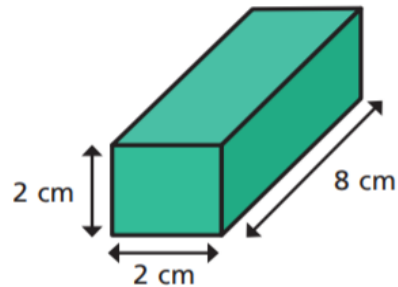


volume = cm^3

7 a) Calculate the volumes of the two cuboids.



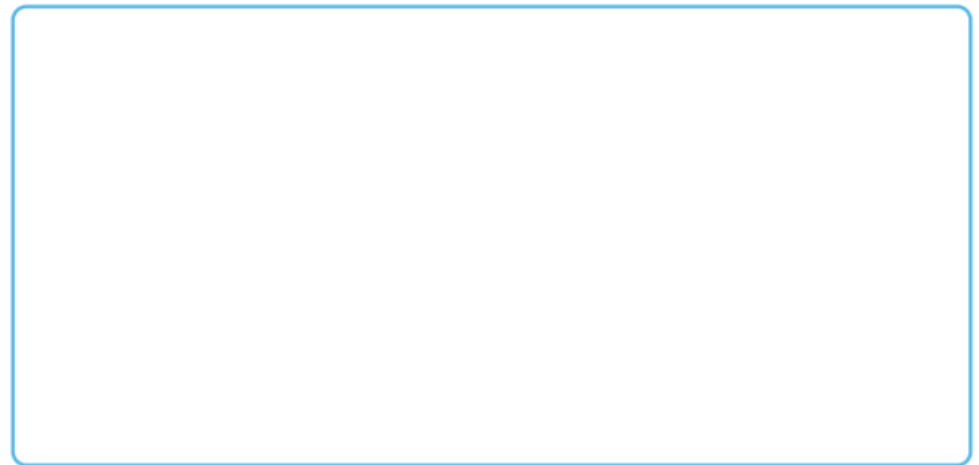
cm^3



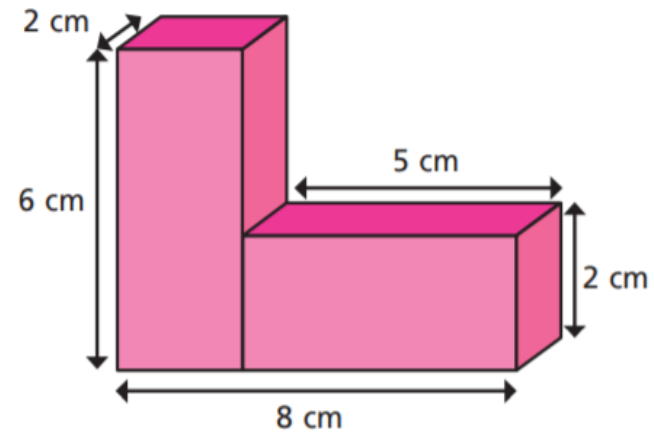
cm^3

What do you notice?

b) Draw two different cuboids that have a volume of 24 cm^3



8 Calculate the total volume of the shape.



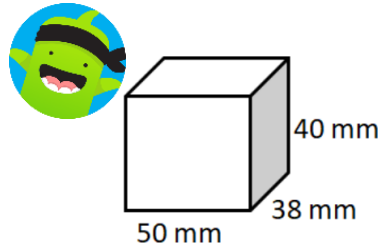
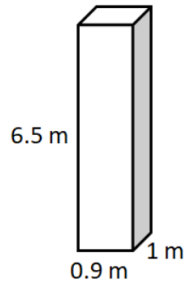
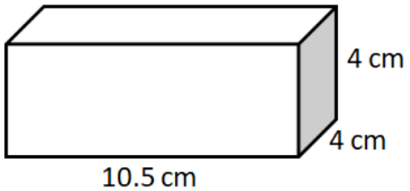
volume = cm^3



Maths– Lesson 5: Challenge 1

Question 1

Calculate the volume of each cuboid.



Question 2

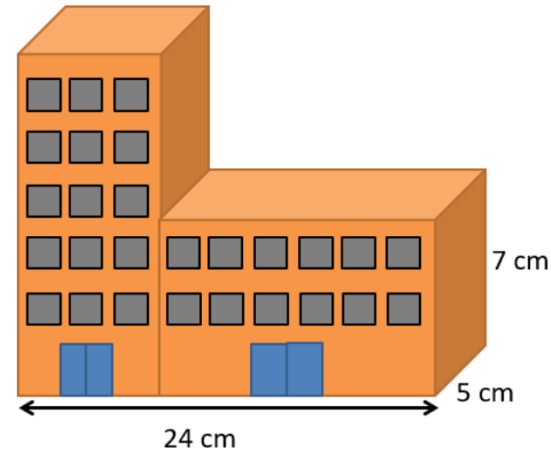


Dan has a large collection of tropical fish. He needs an aquarium with a volume of 600 m^3 .

Sketch four possible cuboids which have this volume.

Which would you choose for the aquarium and why?

Question 3



A toymaker makes wooden buildings. This solid toy is made of a tall and a short building.

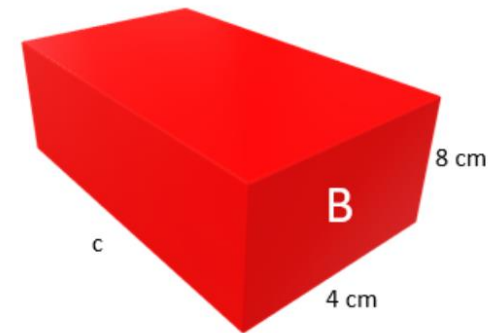
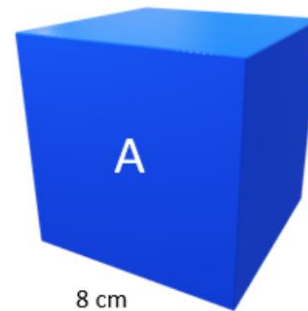
The tall building is twice the height of the short building.

The short building is twice as wide as the tall building.

What is the volume of the wooden toy?

Question 4

Cube A and cuboid B have the same volume. Find the missing length on the cuboid, c.



Answers are included at the end of the learning pack.



Arithmetic Challenge

Q1

$$\boxed{} = 7092 + 582$$



1 mark

Q3

$$2^3 + 4 =$$



1 mark

Q2

$$1 - 0.67 =$$



1 mark

Q4

$$21.64 \times 4 =$$



1 mark



Q5

95% of 480 =

Grid area for Q5 with a 1 mark circle in the bottom right corner.

Q8

$19 - 3 \times 4 =$

Grid area for Q8 with a 1 mark circle in the bottom right corner.

Q6

$3510 \div 78 =$

7	8	3	5	1	0
---	---	---	---	---	---

Grid area for Q6 with a 2 marks circle in the bottom right corner.

Q9

$1643 \times 89 =$

	1	6	4	3
x		8	9	

Grid area for Q9 with a 2 marks circle in the bottom right corner.

Q7

$\frac{7}{10} + \frac{2}{5} =$

Grid area for Q7 with a 1 mark circle in the bottom right corner.

Q10

$13 \times 2\frac{1}{2} =$

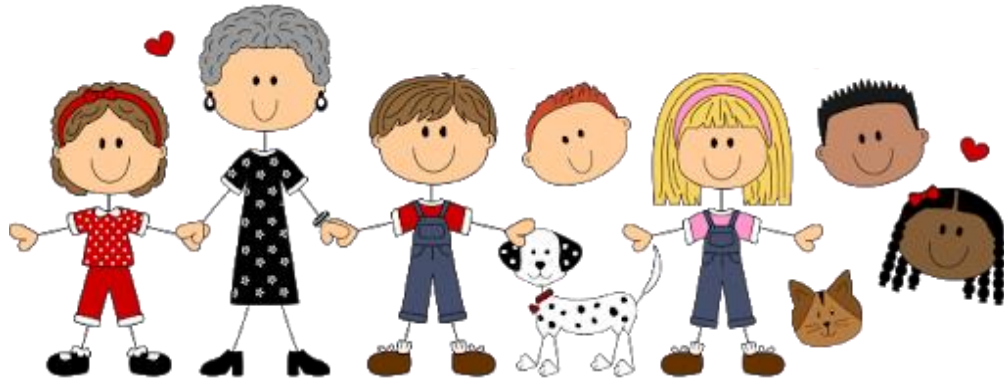
Grid area for Q10 with a 1 mark circle in the bottom right corner.



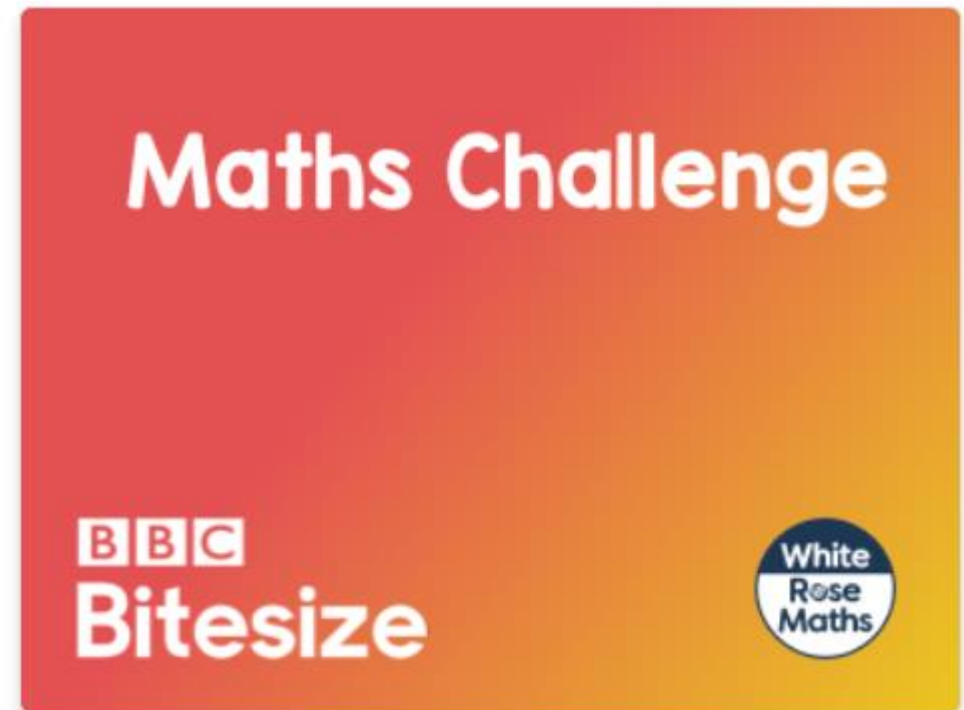
Maths Bonus Challenges!

It is that time of the week! Click [here](#) to work with your family on these maths problems.

Do as many as you can and help each other out!



If you just fancy having a go on your own, the most suitable questions for Year 6 are 1 to 6.



All answers to the above questions are included on the webpage for this lesson and at the end of this learning pack.

English – Lesson 1: Reading Comprehension

Extract from *The Storm Keeper's Island* by Catherine Doyle



How to answer...

- Read the question twice **x2**
- WWW - Who? What? Where? **WWW**
- Find the right page/section
- Skim and scan the area for the key information
- Read around the information
- Write down your answer
- Check - does it make sense?



14



Inference

- Use what you have read to come to a conclusion
- Form an opinion by reading between the lines
- Provide evidence from the text to back up points where appropriate
 - Point + Evidence
 - Point + Explanation



15





The Storm Keeper's Island - Chapter 1 - The Sleeping Island

Fionn and his sister were close in age. Fionn could even remember a time when they felt almost like *friends*. He supposed they'd had something in common until the day she turned thirteen and he stayed eleven, and suddenly she was much too wise and too clever to hang around and play video games with him any more.

I'm mature now Fionny. My interests have changed.

Fionn didn't know how Tara measured maturity but he was the one cooking dinner for the three of them most evenings, while Tara pawed Nutella out of the jar like Winnie-the-Pooh and shrieked the walls down any time she saw a spider

Tara smirked over her shoulder and then stepped higher on the boat railings, peering over the waves, until it looked like she was going to dive in, just to show him she could. Fionn thought it might be nice if she tipped over, and drowned a little. Not enough to die, just enough so that a fish could come along and eat the part of her brain that caused her personality to be so terrible.

He went back to staring at the blurry horizon - a fixed point to help with the sickness. His mother said it would help with the motion of the boat. That was the last thing she told him before their goodbye back in Dublin, when her eyes were clear and her smile was sad. Then all of a sudden they were in their neighbour's car, Fionn's nose pressed up against the window, as they trundled across the country and left her behind.

Fionn waited for the island to appear. The one she used to tell them about when he was younger, her eyes glassy with some faraway look. Sometimes the island was a beautiful place. Sometimes it was a sad, unforgiving place that held nothing beyond the memory of his father, long ago lost to the sea. All Fionn ever knew for sure was that Arranmore haunted her, and he could never figure out whether that was mostly a good thing or mostly a bad thing. Only that places can be just as important as people. That they can have the same power over you if you let them.

Tara left her perch at the front of the ferry, skipped across the deck and bent down until they were almost nose-to-nose. "Do you have to look so depressed about all this?"



English – Lesson 1: Reading Comprehension: Independent Task

- 1) Complete the table with one piece of evidence from the text to support each statement.

Statement	Evidence
Fionn and Tara don't have things in common anymore	
Fionn was more mature than Tara	

- 2) Tara is a confident character.
Find a piece of evidence in the text which supports this.
- 3) *'when her eyes were clear and her smile was sad'*
What does this suggest about how his mother felt when saying goodbye?
- 4) What evidence from the text suggests that Fionn didn't want to leave with the neighbours?

Answers are included at the end of the learning pack.



English – Lesson 2: Reading Comprehension

Extract from *The Storm Keeper's Island* by Catherine Doyle

The Storm Keeper's Island - Chapter 1 - The Sleeping Island

She took a bite, her words soupy from half-chewed caramel. "It's an adventure, Fionny." She glanced from side to side, then dropped her voice. "This place is magical. Just wait and see."

"You only think it's magical because you met a *boy* last year," said Fionn with deep, abiding disgust.

Tara shook her head. "No, *actually*, I think it is magical because there are *secrets* on the island."

Fionn tried to waft the smell of chocolate away from his nose. "What kind of secrets?"

"Can't tell you!" she said, eyes gleaming with triumph.

Fionn sighed. "I Can't believe I'm going to be stuck with you all summer."

"Well, I wouldn't worry because I *obviously* won't be spending any time with you." She wrinkled her nose, her freckles hunching together. "You can hang out with Grandad."

"I already like him better than you," said Fionn quickly.

"You don't even *know* him yet."

Fionn opened his fist to reveal his crumpled-up ferry ticket. "I like this piece of paper better than you."

Tara brandished her Mars bar at his nose. "You're so immature."

"I am not." Fionn waited for her to look the other way and then threw the piece of paper at her. He watched it tangle in the ends of her hair and felt a little better then.

Across the bay, a seagull dipped and swirled, its wing skimming the waves. It released a savage cry, and as if called to attention, the island rose to meet them.

Pockets of dark green grass bubbled up out of the sea, climbing into hills that rolled over each other. Gravel roads weaved themselves between old buildings that hunched side by side along the pier, where the sand was dull and brassy. The place looked oddly deserted; it was as if the entire island was fast asleep.

Arranmore.



It was exactly how Fionn imagined it: a forgotten smudge on the edge of the world. The perfect place for his soul to come to die.

Tara flounced back to her perch and Fionn felt himself deflate, like a giant balloon. He watched the faraway blurs on the island turn into people, shops, houses and cars, and too many fishing boats to count. He tried to picture his mother here, in this strange place, wandering along the pier, ducking into the corner shop for bread or milk. Or even standing on the shore, looking out at the ocean, with her arms pulled around her. He couldn't imagine it, no matter how hard he tried.

When the ferry had finally groaned its way into port, Tara bounded on to the island without as much as a backwards glance. Fionn hovered on the edge of the pier, his spine stiff as a rod. Something was wrong. The ground was vibrating underneath him, the slightest tremor rattling against his soles as though his footsteps were far heavier than they really were. The breeze rolled backwards and twisted around him, pushing his hair into his eyes and his breath back into his lungs, until he had the most absurd sensation that the island was opening its arms and enveloping him.

Fionn searched the jagged lines of the headland. In the distance, at the edge of the bay, where briars and ferns tussled on a low, sloping cliff, a cottage poked out of the wilderness. The smoke from its chimney curled into the evening air like a finger. The wind pushed him across the pier. The smoke kept rising and twisting, grey against the sun-blush sky.

It was beckoning him.

Fionn could almost hear the whispering in his ears: a voice he had never heard before, a voice thrumming deep in his blood and in his bones. A voice he was trying very hard to ignore.

"Come here," it was saying. "Come home."



English – Lesson 2: Reading Comprehension: Independent Task

1) Read the paragraph beginning ‘Tara flounced back...’

What is Fionn thinking during this part of the text?
Tick **one** thought.

- I don't believe that mum would ever have been here on this island.
- Those shops and houses look pretty.
- I can't wait to go out on one of those many fishing boats.
- I feel so disappointed.

2) ‘Tara **bounded** on to the island without as much as a backwards glance. Fionn **hovered** on the edge of the pier, his spine stiff as a rod.’

What do the words ‘*bounded and hovered*’ suggest about how the characters felt at the time?

3) What impressions do you get of the island?

Give **two** impressions, using evidence to support your answer.

Impression	Evidence
<hr/>	<hr/> <hr/> <hr/>
<hr/>	<hr/> <hr/> <hr/>

Answers are included at the end of the learning pack.



English – Lesson 3: Identifying Features

1 **In a field full of wild flowers**, a boy and a girl stood side by side beneath an ancient oak tree. **The sky was angry**, the **thunder growling like an angry beast**.

"Are you ready?" asked the boy nervously.

The girl raised her chin, her wheat-blond hair sweeping down her back in a curtain. "I've *always* been ready."

They pressed their palms against the **gnarled** trunk. The tree began to **quiver**, its branches **stretching as it shook itself awake**. There was a brief silence and then

2 **A whip of lightning leapt from the clouds and split the centre of the tree in two**. Flames **erupted** along the bark, climbing across the branches and **devouring** the leaves until everything was a bright, brilliant gold.

"Betty?" said the boy uncertainly. "Should we -"

"Sssh!" hissed the girl. "It's about to say something."

The tree began to whisper. It was much louder than the boy expected - the **crackle and hiss of surrounding flame** slowly turning into words. "*Ssssspeak or be sssspoken to.*"

7 The girl asked her question. As the tree considered it, she grew restless, tapping her fingers against the **charred** bark.

The air grew heavier, **a veil of mist curling the strands** around her face. The tree did not speak to the girl again.

Instead, it turned its attention to the boy and climbed inside his head. He fell to the ground, twisting and writhing, as a vision unfurled in the blackness of his mind.

He was standing on the edge of a headland with the clouds gathering in his outstretched hands and the wind wreathing his body. **He felt the sea rushing through his veins, leaving salt crystals in the lining of his heart**.

8 He knew that he was changed forever. Betty had been wrong. The island had chosen him. He tried to blink himself awake but the tree tightened its grip on his mind. Another vision pushed its way through. Something they had not asked to see.

"Watch," hissed the tree. "*Pay attention.*"

3

4

5

6

9

10



A boy appeared before him. He was a little younger, but he was wearing the same nose and the same eyes. In one hand, he held **an emerald as green as the island grass**. In the other, a crooked staff that pointed out to the sea. They stood apart from each other, looking but not really seeing as ravens filled the sky in plumes of feathers. The earth **cracked beneath their feet** and **a shadow crept** across the island and **buried them in darkness**.

The boy woke up. Back in the field of wild flowers, it was pouring with rain.

"Betty," he said, a droplet landing squarely in his mouth. "You won't believe what I've just seen.

The girl was standing over him, her narrowed eyes like burning coals. She kicked him in the ribs. "Don't you mean what you just *stole*!"

"Stop!" He twisted away from her as she kicked him again. "I need to tell you something. Can you stop, please? *Ow!* Listen to me. I saw ravens, Betty. I think..."

The girl wasn't listening. She was stalking away from him, through wild flowers and **sodden grass**, her chin tipped to the weeping sky.

The boy wanted to call her back, to tell her this was much bigger than her - that it was bigger than both of them - but she had disappeared into thin air, leaving only the faintest ripple behind.

The boy tried to swallow his fear. **Somewhere deep inside the earth**, the darkness was rising again, a darkness more terrible than anything the world had ever seen.

It was too late to stop it now.

Answers are included at the end of the learning pack.



English – Lesson 4: Using Figurative Language

Choose one of the pictures below to write **some EXCELLENT** a range of descriptive sentences using figurative language to create atmosphere. You will be able to use these sentences in your writing tomorrow for the final session.





Use this week's VIPs to help you: here are some examples of how to use figurative language, the five senses and parenthesis to be descriptive.

VIPs (Very Important Points)

1. Figurative language is often when words or phrases do not necessarily have their literal, every day meaning. It is used to paint a picture in the reader's mind.

Examples of figurative language includes the use of similes, metaphors and personification - there are more, so feel free to use the Internet to search for other techniques to use when using figurative language, and look out for some examples.

Simile - The trees were *like giants*.

Metaphor - The *giants* towered over me.

Personification - The trees were like giants, standing tall and intimidating, *watching my every step*.



3. Parenthesis is an additional phrase or clause within a sentence to add more detail, an explanation or an afterthought. This can be used for additional description, or maybe to add some tension and drama into your setting description.

The towering giants leaned over me as their branched-arms reached out. I was all alone - or so I thought!

2. The Five Senses are: see, hear, smell, taste and touch.

Describing these in detail will really build up a picture of your setting description.

Darkness loomed all around. I could just about see the ends of my toes, but no further - the fog was too thick. The hoots, which I imagined to be the warning signs of the owls, echoed around my head, as an unexpected, dreadful stench invaded my nostrils - it wasn't long until I could taste it too. Where was I!? I extended my arms in a desperate attempt to guide my direction, when a texture, that I could only liken to grit-infested slime, soon covered my fingers and palms.



English– Lesson Five: Writing a Setting Description

Today you will write your setting description. Use the written examples and skills you have learnt in previous lessons to write a detailed description of a setting. Remind yourself of the pictures and your writing from yesterday and base your description around it.

Your description must include:

Powerful vocabulary choices

Whether it be adjectives or verbs, powerful vocabulary - avoiding common or generic words - helps the reader to create the scene inside their head.

Figurative language

When figurative language is used effectively, it amplifies writing and contributes to a more creative tone which engages the reader.

Sentence openers

Using a range of sentence openers (e.g. prepositional openers) contributes to the scene a reader can imagine and prevents the reader switching off.

Builds atmosphere

Writers often use language in effective ways so they are able to create a suitable sense of atmosphere and mood which intrigues the reader and keeps them engaged.

Ambitious vocabulary you could include:

foothills	isolated	spectacular	abundant	luscious
altitude	uncharted	turbulent	impenetrable	desolate
impassable	dramatic	undulating	serene	uninhabited
monstrous	magnificent	fascinating	tranquil	vivid
boundless	picturesque	majestic	flourishing	mesmerising



Maths – Lesson 1: Challenge 1 - Answers

1.

Area is the amount of space inside a two-dimensional shape. It can be measured in units such as cm² or m²

Perimeter is the distance around a two-dimensional shape. It can be measured in units such as cm or m

2.

perimeter = <input type="text" value="20"/> cm	perimeter = <input type="text" value="20"/> cm
area = <input type="text" value="24"/> cm ²	area = <input type="text" value="16"/> cm ²

3.

a)

area = 32 cm²
perimeter = cm

b)

area = cm²
perimeter = 40 cm

c)

area = m²
perimeter = 36 m

4.

area = <input type="text" value="30"/> cm ²	area = <input type="text" value="29"/> cm ²
perimeter = <input type="text" value="22"/> cm	perimeter = <input type="text" value="22"/> cm

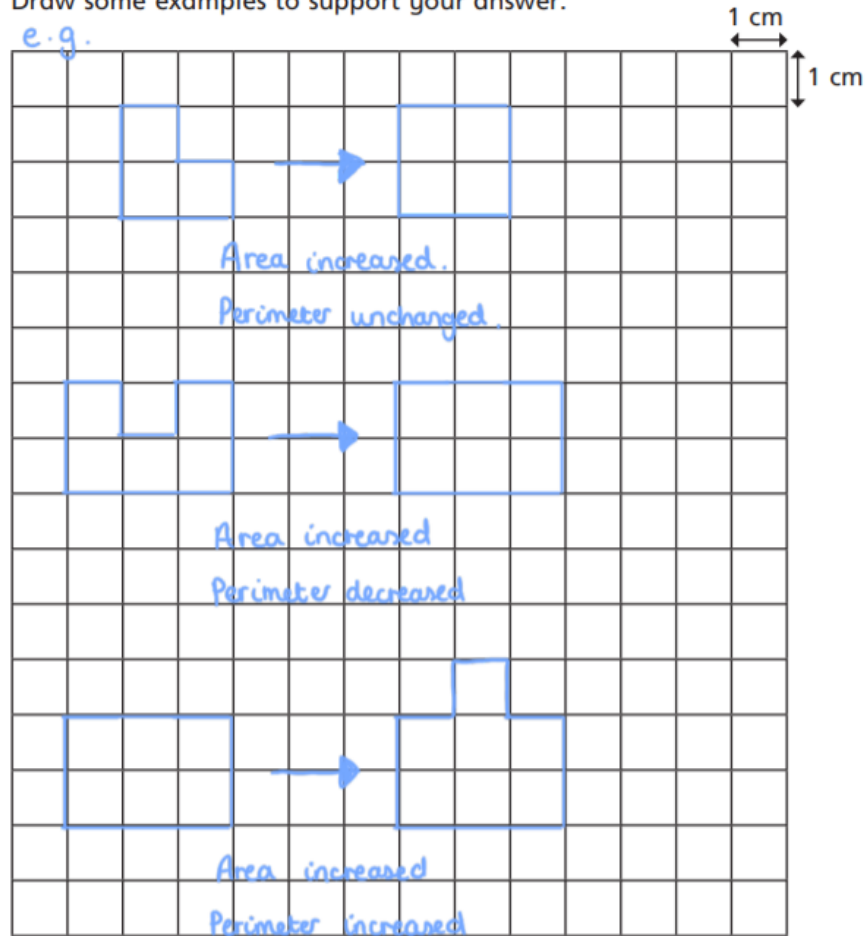


Maths – Lesson 1: Challenge 1 - Answers

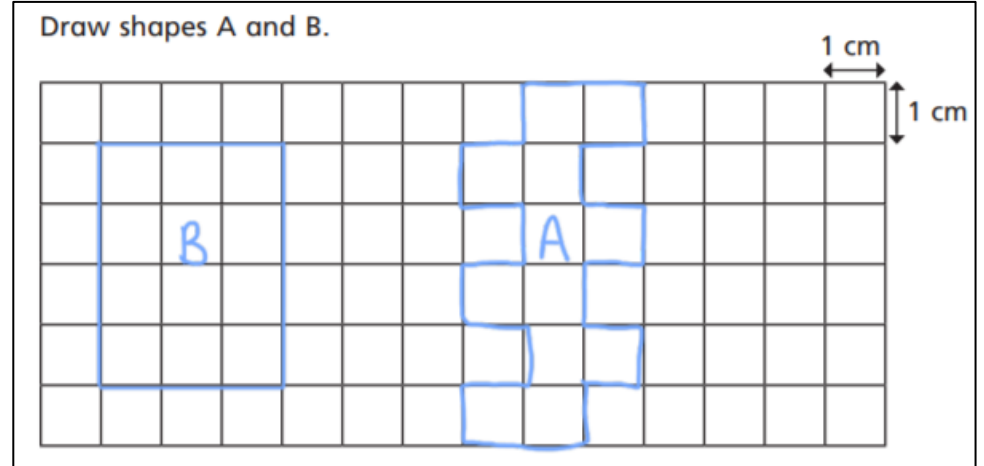
5. Who do you agree with? Amir

Draw some examples to support your answer.

e.g.



6. Draw shapes A and B.



7. a) Draw an example of a shape he could make. Give units on your diagram.



b) What is the greatest possible area of the enclosure? $156m^2$

c) What is the smallest possible area of the enclosure? $24m^2$



Maths – Lesson 2: Challenge 1 – Answers

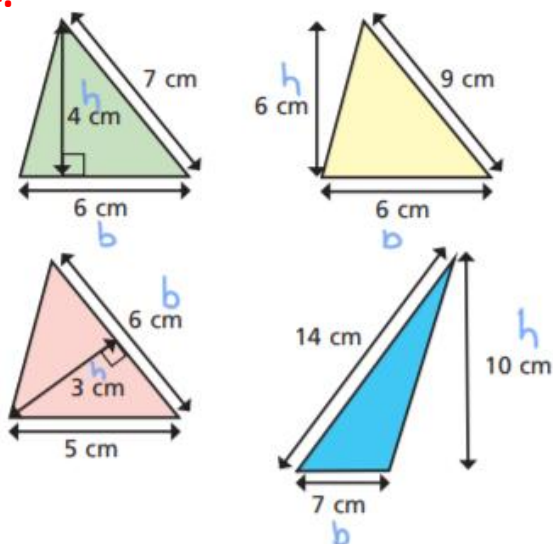
1. area = 9cm^2

2. a: area = 15cm^2 b: area = 35cm^2 c: area = 15cm^2 d: area = 35cm^2

3. Dora has not used the height of the triangle in her calculations.

Area = 14cm^2

4.



5. a: sometimes b: sometimes

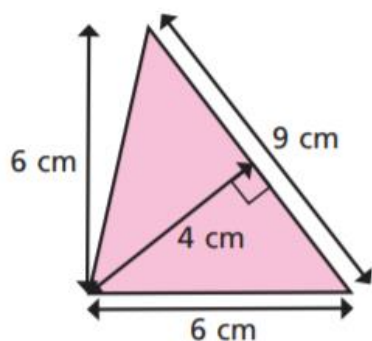
6. a: area = 20cm^2 b: area = 15cm^2

c: area = 35cm^2 d: area = 12cm^2

e: area = 7.5cm^2 f: area = 32cm^2

7. area = 50cm^2 8. x = 3cm y = 24cm

9. Show two ways you can work out the area of the triangle.



$$\frac{9 \times 4}{2} = 18\text{cm}^2$$

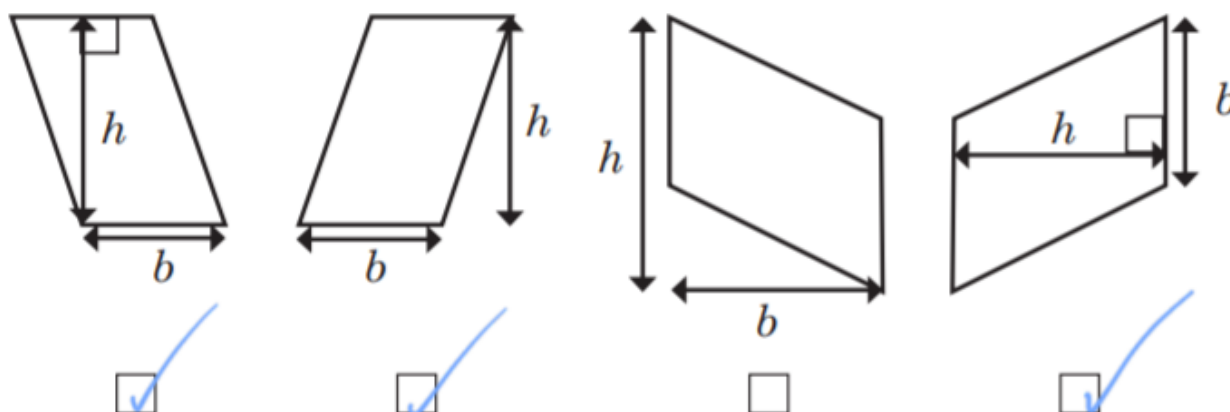
$$\frac{6 \times 6}{2} = 18\text{cm}^2$$



Maths – Lesson 3: Challenge 1 – Answers

1. The area of the rectangle is **24** squares.
The area of the parallelogram is **24** squares.
2. **a:** area = **9cm²** **b:** area = **8cm²**
3. Huan hasn't used the perpendicular height. The correct answer is **60cm²**

4.



5. **a:** area = **20cm²** **b:** area = **10cm²** **c:** area = **90cm²**
d: area = **30cm²** **e:** area = **18cm²** **f:** area = **40cm²**

6. **a:** = **3cm** **b:** = **300cm**

7. **a:** area = **24cm²**



Maths – Lesson 4: Challenge 1 – Answers

1. a: volume = 36cm^3 c: volume = 36cm^3

2. a: volume = 27cm^3 c: volume = 40cm^3

3. a: volume = 192cm^3 c: volume = 300cm^3

4. a: volume = 125cm^3 c: volume = 343mm^3

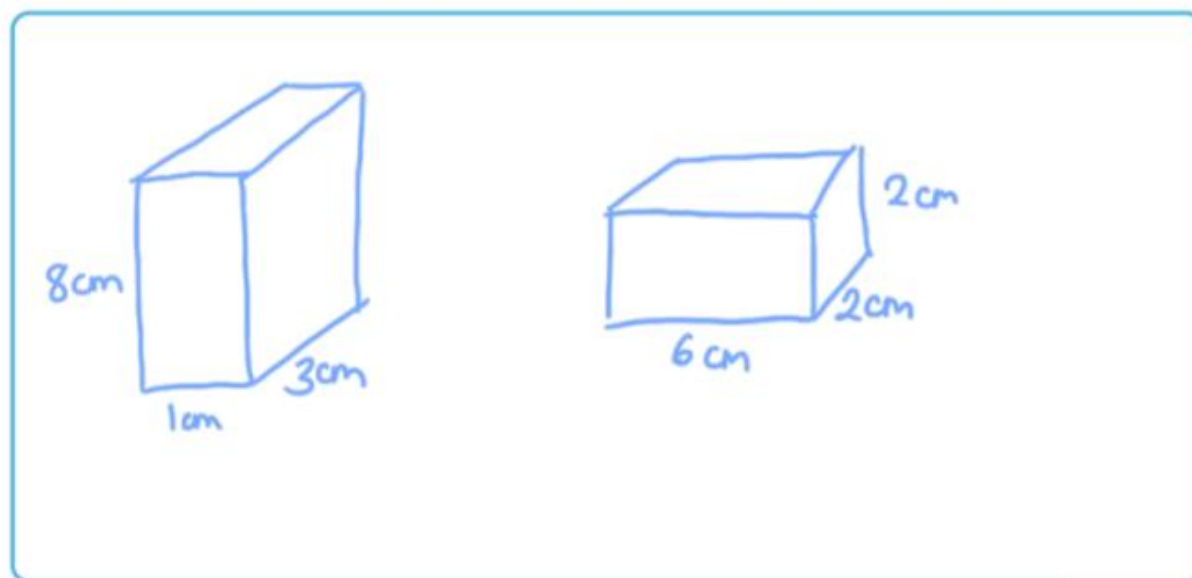
5. a: missing length = 4m

6. a: volume = $150,000\text{cm}^3$

7. a: Cuboid 1: = 32cm^3 Cuboid 2: = 32cm^3

b: Draw two different cuboids that have a volume of 24 cm^3

e.g.



8. volume = 56cm^3



Maths – Lesson 5: Challenge 1 – Answers

1. a: $4 \times 4 \times 10.5 = 168\text{cm}^3$ b: $1 \times 0.9 \times 6.5 = 5.85\text{m}^3$

c: $40 \times 50 \times 38 = 76,000\text{mm}^3$

Don't forget your unit of measure!

2. $1 \times 2 \times 300 = 600$

$2 \times 3 \times 100 = 600$

$4 \times 3 \times 50 = 600$

$5 \times 2 \times 60 = 600$

3. $14 \times 8 \times 5 = 560\text{cm}^3$

$7 \times 5 \times 16 = 560\text{cm}^3$

$560 \times 2 = 1,120\text{cm}^3$

4. Cube A: $8 \times 8 \times 8 = 512\text{cm}^3$

Cube B: $8 \times 4 \times c = 512\text{cm}^3$

$32 \times c = 512\text{cm}^3$

$512 \div 32 = c$

$c = 16 \text{ cm}$



Family Challenge

Answers

Challenge 1 - 68p

Challenge 2 - 50

Challenge 3 - 34, 42, 50

Challenge 4 - $6/16 = 3/8$

Challenge 5 - 890 g

Challenge 6 - 33

Challenge 7 - 690 people

Challenge 8 - 110 g

Challenge 9 - 14 cm

Challenge 10 - 300 adults

Arithmetic Challenge

Answers

1. 7674

6. 45

2. 0.33

7. $32\frac{1}{2}$

3. 12

8. 7

4. 86.56

9. 146,227

5. 456

10. $1\frac{1}{10}$



English – Lesson 1: Reading Comprehension - Answers

- 1) Complete the table with one piece of evidence from the text to support each statement.

Statement	Evidence
Fionn and Tara don't have things in common anymore	She was too wise and too clever to hang around and play video games with him.
Fionn was more mature than Tara	He cooked for the three of them most evenings, she used her hand to eat nutella out of a jar and shrieks when she sees a spider.

- 2) Tara is a confident character.
Find a piece of evidence in the text which supports this.
She stepped higher on the railings
She was peering over the side
- 3) *'when her eyes were clear and her smile was sad'*
What does this suggest about how his mother felt when saying goodbye?
She was unhappy about them leaving but she didn't want to show it so was still smiling.
- 4) What evidence from the text suggests that Fionn didn't want to leave with the neighbours?
He pressed his nose up against the window.

English – Lesson Two: Reading Comprehension - Answers

- 1) I don't believe that mum would ever have been here on this island.
- 2) **Bounded suggests that Tara was excited about getting to the Island. Hovered suggests that Fionn was hesitant to move and didn't really want to be there.**
- 3) What impressions do you get of the island?

Give **two** impressions, using evidence to support your answer.

Impression	Evidence
mysterious/magical	-There are secrets on the island. -This place is magical.
ancient/old	-old buildings that hunched side by side along the pier
abandoned/empty	-The place looked oddly deserted.
beautiful/pretty	-Pockets of dark green grass -hills that rolled over each other



English – Lesson 3: Identifying Features - Answers

1. adverbial phrase
2. personification
3. personification
4. personification & simile
5. powerful adjective
6. powerful verb
7. metaphor
8. metaphor
9. onomatopoeia
10. powerful adjective
11. simile
12. building atmosphere
13. building atmosphere
14. powerful adjective
15. fronted adverbial