

## Year 6 - Home Learning Project - Week 11 - 29/06/2020: Perilous Peaks

### Daily activities:

<b>English worksheet and tasks</b> Look at 'The House in The Rainforest' and complete the tasks below.	<b>Maths</b> Complete the <a href="#">White Rose Maths</a> tasks at the end of this document - 1 per day. <b>Ensure you watch the video before you complete the task.</b>	<b>Reading Plus</b> Log into <a href="#">Reading Plus</a> and complete your weekly reading comprehension tasks and vocabulary tasks. <i>Site code: rpendea2</i>	<b>TTRS and Numbots</b> Working on <a href="#">Times Table Rockstars</a> - Can you complete all the set games and challenge somebody in our school? Are you winning in the current Battle of the Bands?	<b>PE session</b> Join Joe Wickes live every Mon, Weds and Fri morning @ 9:00am or access it any time throughout the day.	<b>A Topic activity from the choices below.</b> Try to complete all of the tasks and send your work to your teacher.
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This week's themed learning is based around our new topic of **Perilous Peaks**.

### Geography: Do mountains all stay the same?



What shape is a mountain?

Every mountain is a different shape due to a variety of reasons. Mountain Matterhorn (see image above) was formed by a glacier movement scouring around what became the peak.

Research the different reasons mountains are different shapes. Make notes on each of the causes below:

- **Erosion**
- **Glaciers**
- **Weather and temperature**

Give examples of Mountains where the reasons above have caused it to change its shape.

### Art: Landscape - Post Impressionism

Last week we introduced ourselves to **Post Impressionism Art**. Over the coming weeks we are looking to create a piece of post impressionism of a chosen mountain landscape.

To develop our understanding of the type of art, we are going to look at two different pieces and compare them. Look closely at what you think is similar between the artwork and what is different.

### Music: In the Hall of the Mountain King



We hope you've been enjoying listening to Greig's composition the last couple of weeks.

**Listen** again to the piece of music on [BBC ten pieces website](#) and hear the story it tells with the music. Underneath, the story has been told with the aid of a story map however it has been mixed up. Can you put the story in the correct order?

Why not create your own original piece of art while listening to "In the Hall of the Mountain King?" You could try it with chalk, crayons, mixed media. The list is endless. We'd love to see your pictures. .

Complete the **COMPARE-it sheet** below. Consider the colour, shape, line, texture and emotion.

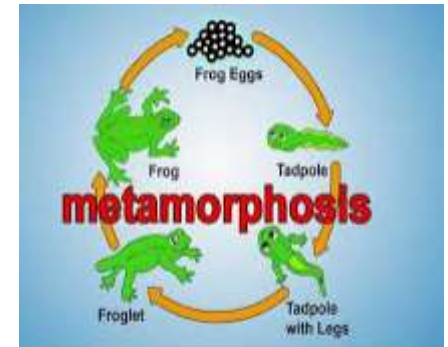


### **Science: Metamorphosis**

Metamorphosis is a process by which animals undergo an abrupt and obvious change in the structure of their body and their behaviour.

Some animals undergo complete metamorphosis, in which they completely transform. Other animals experience incomplete metamorphosis, where they go through several different stages, with each stage getting bigger than the last.

Amphibians and insects are examples of animals that undergo metamorphosis. Their life cycles show the stages of their transformations.



**Task 1:** Watch the incredible changes during metamorphosis on this [BBC video](#). Can you pause the video after the metamorphosis of the tadpole and explain the process in your own words to someone else? You may need to watch the clip a few times.

**Task 2:** You will find the stages below of metamorphosis for a frog and a butterfly however they are mixed up. Can you put them in the correct order?

**Task 3:** Using your knowledge of metamorphosis can you complete the information sheets below to describe the changes to the frog and the butterfly?



### Computing:

Personify something Take a photo of an everyday object at home or outside, and draw on it using an editing tool for example Markup to transform it into a character.

### Spanish: Festivals



Spain is home to many wonderful festivals and one of the most famous is the festival of San Juan celebrated all over Spain on the 23<sup>rd</sup> and 24<sup>th</sup> of June. One of the most notable traditions is the bonfire festivals that dot the beaches. Read more about this fascinating festival [here](#). Then, imagine that you were at one of the bonfires whilst on your holiday in Spain. Write a postcard home to describe what you saw and experienced. Don't forget to include some of the superstitions and ideas behind the festival.

### English Grammar: Active or Passive Voice?

A sentence is written in active voice when the subject of the sentence is performing the action.

A sentence is written in passive voice when the subject of the sentence has something done to it by someone or something.

#### For Example:

**Active voice:** The cat was chasing the mouse.

In this sentence, 'the cat' is the subject, 'was chasing' is the verb and 'the mouse' is the object.

**Passive voice:** The mouse was being chased by the cat.

In this sentence 'the mouse' has become the subject which is having something done to it by the cat.

Watch the cartoon [video link here](#) and complete the active and passive voice sentences below.

The cat was chasing the mouse.



The mouse was being chased by the cat.

## Sticky Knowledge (remembering our previous learning):



### History: Democracy in Ancient Greece

During our lessons on Ancient Greece we found out that our ideas of modern day democracy began with the Greeks. Watch

[this video](#) to recap on how democracy worked for the Ancient Greeks. What are the similarities between the Greek system and democracy in the UK today? What are the differences? Underneath, you will find a list of statements, can you sort them in to the correct democratic system?

### Geography: Rainforests

Can you create a survival booklet for someone in the Amazon Rainforest? Take a look at [top tips](#) for survival, how to build a [secure shelter](#) and find out about the most [dangerous animals to avoid](#). You could present your information as a power point or a booklet.



### Science: Adaptation

What is [adaptation](#)? What is [inheritance](#)? Watch the links to recap on what both scientific terms mean.

Think about the Fennec fox and the Arctic fox, both in the same animal family but very different. How has each animal adapted to their environment?

Research the two animals here [Fennec Fox](#) [Arctic Fox](#)

Then explain where in the world you find each type of fox and give three clear examples explaining how each type of fox has adapted to its surroundings.



**Website links mentioned above:**

<https://www.bbc.co.uk/teach/ten-pieces/KS2-edvard-grieg-in-the-hall-of-the-mountain-king-from-peer-gynt/z7nf3k7> - In the Hall of the Mountain King

<https://www.bbc.co.uk/teach/class-clips-video/science-ks2--ks3-the-life-cycles-of-different-organisms/zvh8qp3> - Science Metamorphosis

<https://www.barcelo.com/pinandtravel/en/san-juan-spain-festivals-in-spain/> - Spanish festival of San Juan

[https://www.youtube.com/watch?v=-K\\_eKC76jn4&feature=youtu.be](https://www.youtube.com/watch?v=-K_eKC76jn4&feature=youtu.be) - English Grammar active and passive voice

<https://www.youtube.com/watch?v=0fivQUIC7-8> - Sticky knowledge History - Democracy in Ancient Greece

<https://www.youtube.com/watch?v=UI3wHcF-IQI> - Sticky knowledge Geography - Ray Mears how to build a shelter

<https://traveltips.usatoday.com/survive-amazon-rainforest-12654.html> - Sticky knowledge Geography - Rainforest survival tips

<http://www.walkthroughindia.com/wild-world/top-15-dangerous-animals-amazon-rainforest/> - Sticky knowledge Geography - Dangerous animals in the rainforest

<https://www.bbc.co.uk/bitesize/topics/zvhhvcw/articles/zxg7y4j> - Sticky Knowledge Science - BBC adaptation

<https://www.bbc.co.uk/bitesize/topics/zvhhvcw/articles/zp9f4qt> - Sticky Knowledge Science - BBC inheritance

<https://www.nationalgeographic.com/animals/mammals/f/fennec-fox/> - Sticky Knowledge Science - Fennec Fox

<https://www.nationalgeographic.com/animals/mammals/a/arctic-fox/> - Sticky Knowledge Science - Arctic Fox



## COMPARE-it

This is:



Jon Thorleifsson –  
Icelandic Mountain  
Landscape

What do you notice that is similar?

What do you notice that is different?

This is:




Vincent Van Gogh –  
Les Alpilles  
Mountain Landscape

## Music: In the Hall of the Mountain King

Can you listen to the music and put the story map in the correct order?

The King grabs Peer by the back of his shirt, slams open the last door, and throws Peer out of his castle.



Peer begins to sneak away from the Mountain King

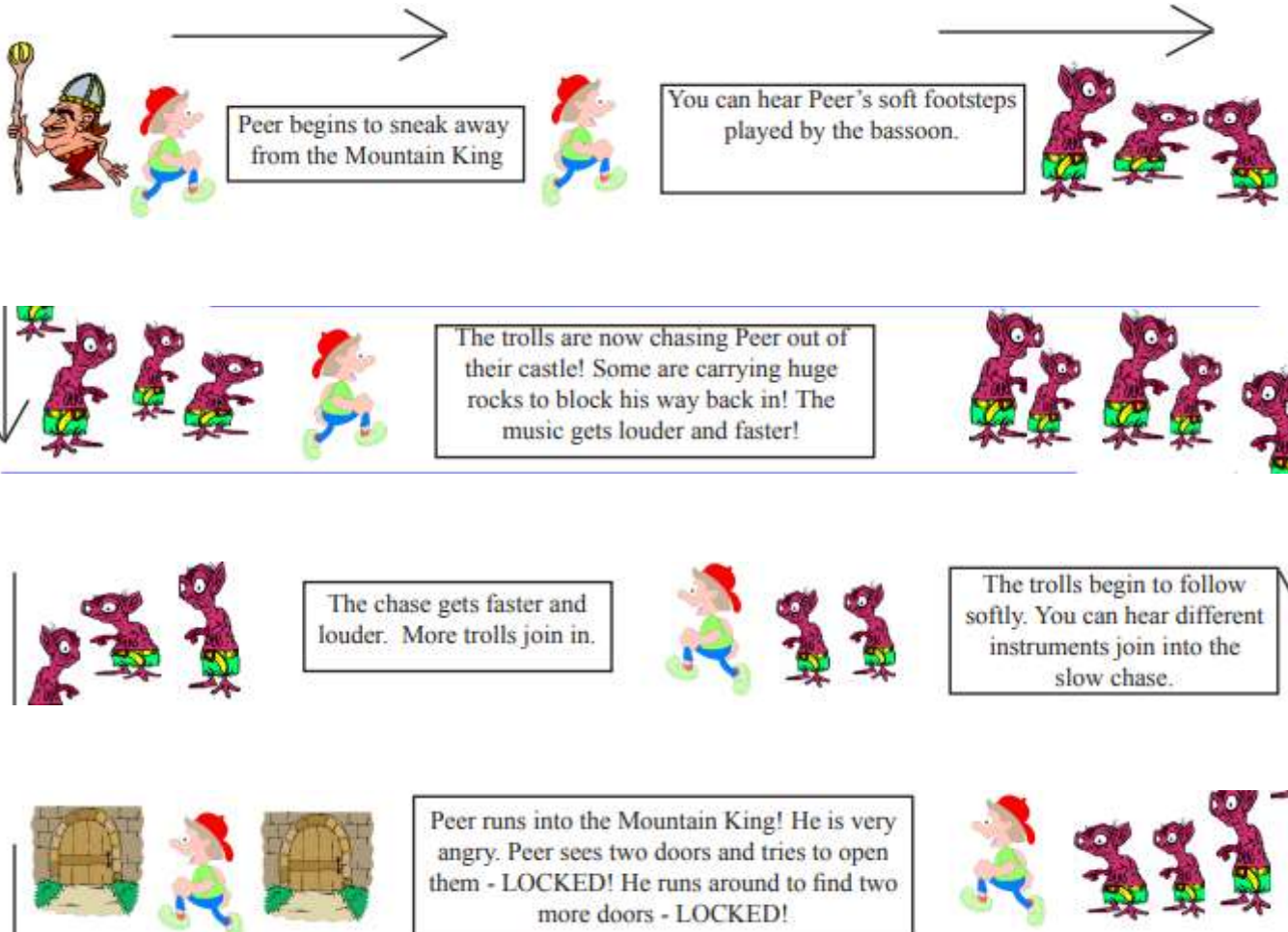
You can hear Peer's soft footsteps played by the bassoon.

The trolls are now chasing Peer out of their castle! Some are carrying huge rocks to block his way back in! The music gets louder and faster!

The chase gets faster and louder. More trolls join in.

The trolls begin to follow softly. You can hear different instruments join into the slow chase.

Peer runs into the Mountain King! He is very angry. Peer sees two doors and tries to open them - LOCKED! He runs around to find two more doors - LOCKED!







## Science: Metamorphosis

### Frog Life cycle - can you put the stages in the correct order?

The tadpole develops lungs and hind legs.



After 2-25 days the tadpoles hatch from the eggs.



The female lays a mass of eggs that are fertilised by the male.



The tadpole grows front legs and its tail shortens. The froglet jumps out of the water onto land.



The tail disappears completely and the froglet starts to eat insects. In 2-4 years it will become an adult and will reproduce.



The tadpole swims and eats plants. It breathes through gills.



Fertilised eggs are laid by the female.



Inside the chrysalis, the caterpillar transforms into a butterfly.



The adult butterfly breaks out of the chrysalis and reproduces.



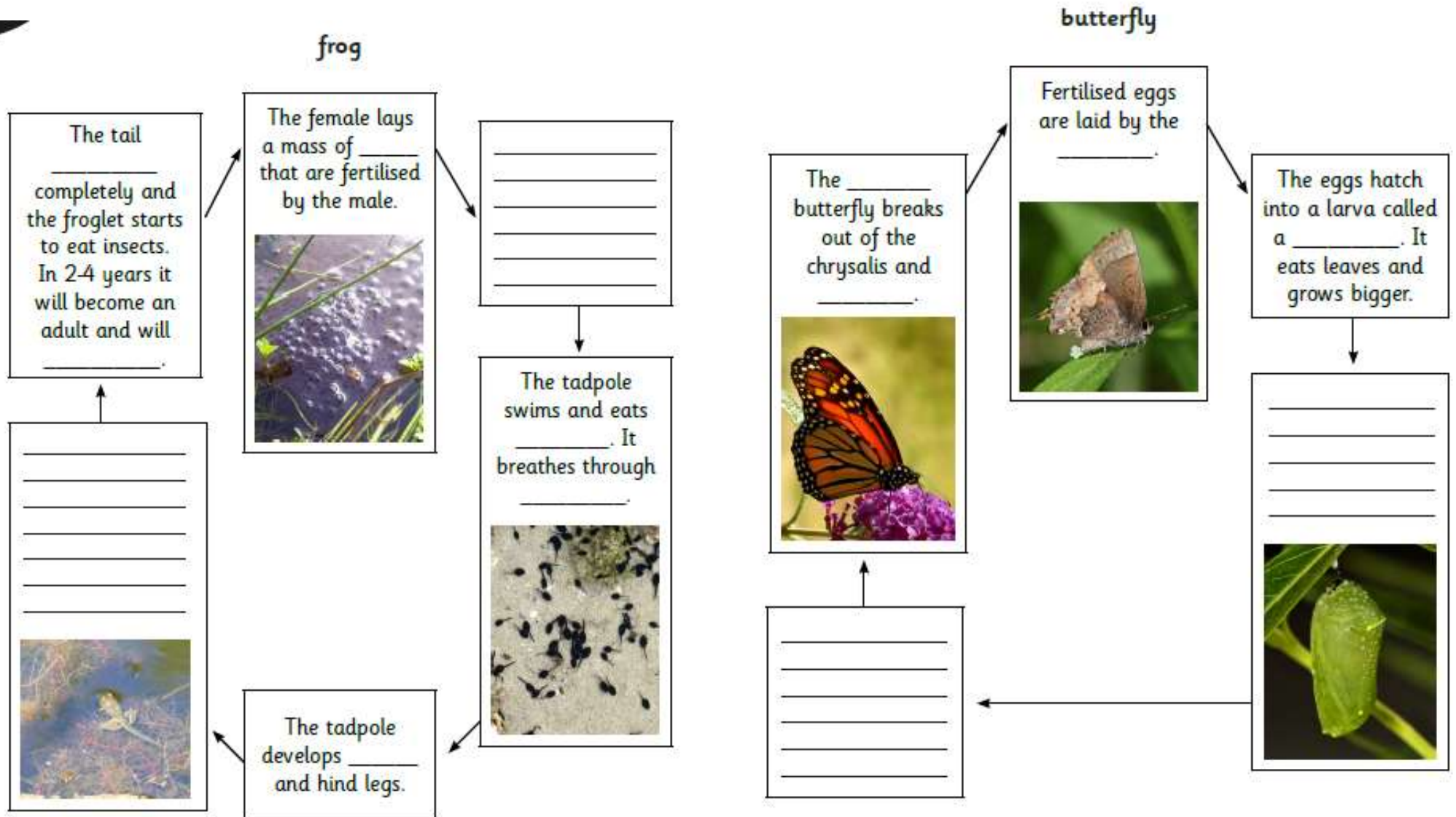
The eggs hatch into larvae called caterpillars. The caterpillar eats leaves and grows bigger.



The caterpillar forms a hard case around itself called a chrysalis.



Science: Metamorphosis Task 3



## English Grammar: Active and Passive voice task

- Watch the video [here](#)
- Read the description of each clip.
- Change the description from the active voice into the passive voice.
  - Active: The dog bit the man. (Past Simple)
  - Passive: The man was bitten by the dog. (Past Simple Passive)



The cat was chasing the mouse.

1. The mouse \_\_\_\_\_

The goose fed the panda.

2. The panda \_\_\_\_\_

The man has given the panther a pair of smelly shoes.

3. The panther \_\_\_\_\_

The cat wakes the woman up every morning.

4. The woman \_\_\_\_\_

The police caught the escaped prisoners.

5. The escaped prisoners \_\_\_\_\_

Barbie is destroying Ken's clothes.

6. Ken's clothes \_\_\_\_\_

The fishermen caught Dory in their net.

7. Dory \_\_\_\_\_

The T Rex was carrying the minions on its back.

8. The minions \_\_\_\_\_

The crabs injured the bird.

9. The bird \_\_\_\_\_

The green chick has eaten the worm.

10. The worm \_\_\_\_\_

## Sticky Knowledge History: Democracy in Ancient Greece

Read through the statements, then cut them up and sort them in to the different boxes.



The group of men who make daily decisions are chosen randomly.

Voters can choose from a few different political parties. Each party has a different set of ideas.

MPs are voted for and join together to make a parliament.

There is no police; a group of 500 jurors decide the punishments.

All citizens (men and women) over the age of 18 can vote.

The elected party will stay in power for four years.

Only men are allowed to vote.

Any male citizen can join the assembly who meet regularly to make decisions about how the state is run.

Democracy in Ancient Greece

Democracy in the UK today



## English Home Learning Y6

### **29/06/2020 - Introduction**

Each week you will receive a set of English tasks. You should aim to complete one each day. Spending about 30 minutes on the picture and question time task, 45 minutes on writing and at least 20 minutes on grammar and spelling. It is fine for you to ask for help from parents, siblings or your teacher through teams.

If you love reading and writing and want more of a challenge you can keep writing stories based on your own ideas or other books you have read.

You can explore

[www.lovereadings4kids.co.uk](http://www.lovereadings4kids.co.uk) or [www.newsela.com](http://www.newsela.com) to find more extracts to read and write about.

### **The house in the rainforest**



## Question time!

Do you think the house in the image is actually in the Malaysian rainforest? Give evidence to support your answer.

Which continent is Malaysia in?

If you were to stumble into the Malaysian rainforest, what plants and flowers might you come across? Name at least three examples with a description.

Malaysian rainforests support a vast diversity of plant and animal life. Name three creatures you might come across.

Who might live in a house like this? Explain your answer.

Living in this house in the rainforest would be very different to living in a house in a city. Give three examples of how it would be different.

If you lived in the Malaysian rainforest, what might a typical day be like for you and your family?

Tuesday 30<sup>th</sup> June 2020 Sick Sentences

Year 6 - The house in the rainforest - Day 2

### Sick sentences!

These sentences are sick and need your help to get better!

There is a house. It is in the rainforest. There are plants.

There are flowers.

Wednesday 31<sup>st</sup> June 2020 Story Starter

Year 6 - The house in the rainforest - Day 3

### Story starter!

Hidden deep in the Malaysian rainforest, is a house.  
Not an ordinary house of course...

Can you continue the rest of the story from this  
starter? What kind of story will it be?

What language do you need to engage the reader?

Think carefully about opportunities to add high level  
punctuation and different sentence structures.

Thursday 1<sup>st</sup> July 2020 Grammar Sentence Challenge

Year 6 - The house in the rainforest - Day 4

**Sentence challenge!**

Using the passive and active voice.

**Passive voice**

The house, which is hidden deep in the Malaysian Rainforest, is surrounded by luscious, green plants.

**Active voice**

Luscious, green plants surround the house, which is hidden deep in the Malaysian Rainforest.

Write three of your own sentences about this image using the passive and active voice.

Friday 2<sup>nd</sup> July 2020 Spelling

Year 6 - The house in the rainforest - Day 5

accommodate

aggressive

apparent

available

accompany

amateur

appreciate

average

according

ancient

attached

awkward

# Year 6 Home Learning - Maths: Area and Perimeter - Monday 29<sup>th</sup> June 2020

Please watch the video first: <https://vimeo.com/430339457>

## Area and perimeter



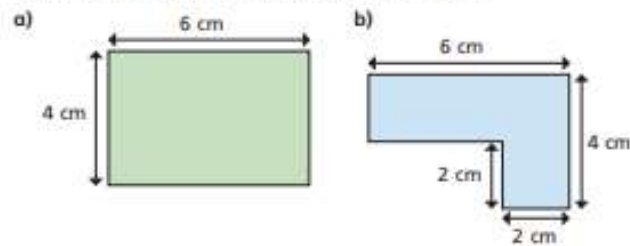
1 Use the words to complete the sentences.

- 

\_\_\_\_\_ 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.



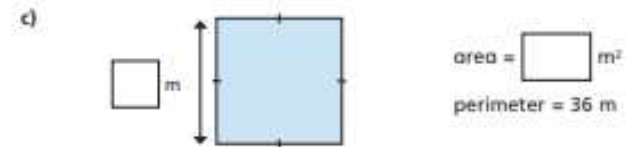
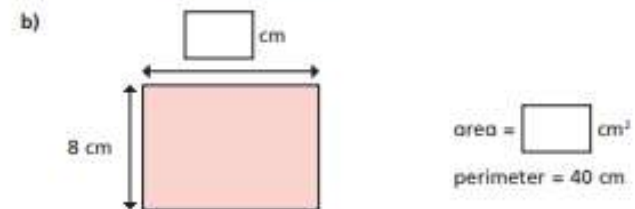
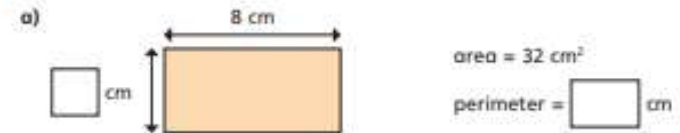
perimeter =  cm

area =  cm<sup>2</sup>

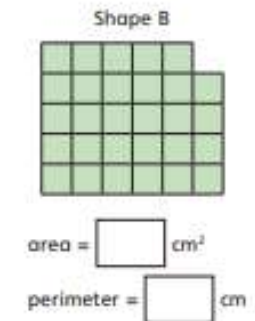
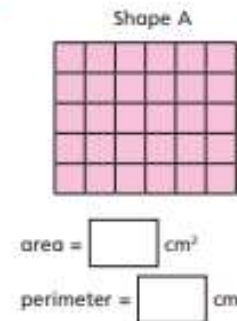
perimeter =  cm

area =  cm<sup>2</sup>

3 Work out the missing values.



4 Work out the areas and perimeters of the shapes.



What do you notice?



5



Tommy

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

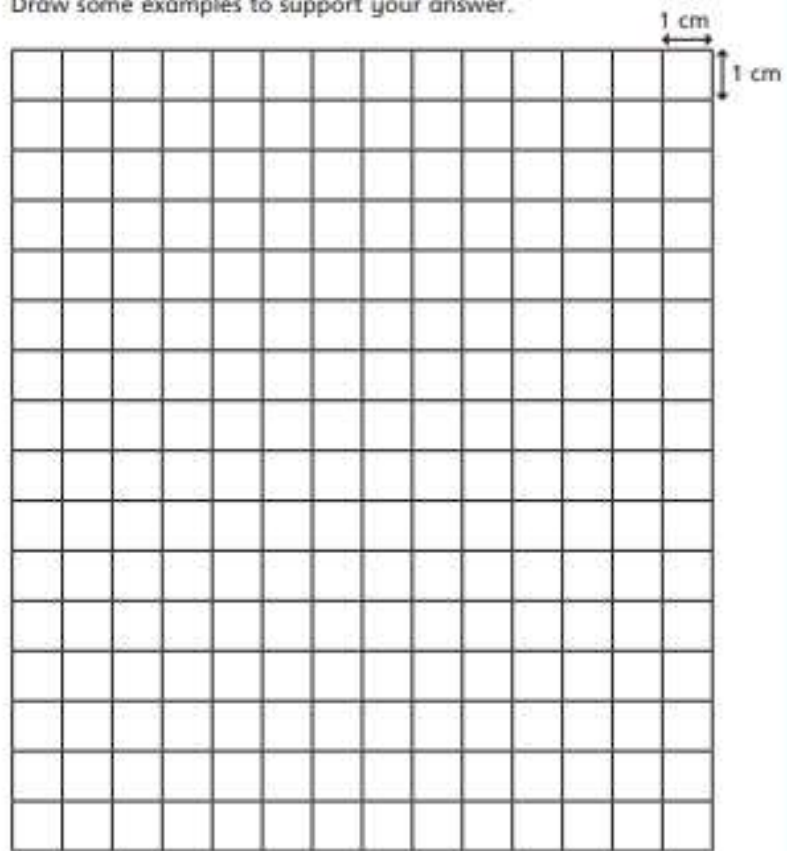
Amir



It depends on the shape.

Who do you agree with? \_\_\_\_\_

Draw some examples to support your answer.

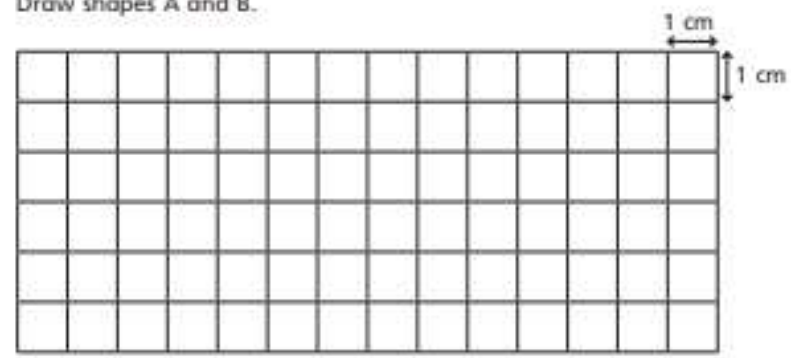


6

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?

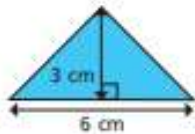
# Year 6 Home Learning - Maths: Area of a triangle (3) - Tuesday 30<sup>th</sup> June 2020

Please watch the video first: <https://vimeo.com/430339609>

## Area of a triangle (3)

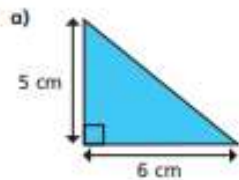


1 Calculate the area of the triangle.

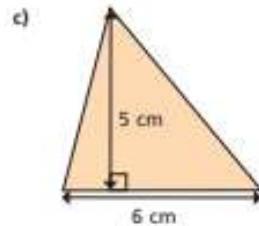


area =  cm<sup>2</sup>

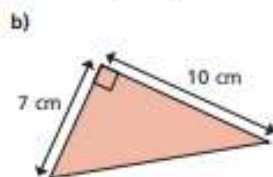
2 Calculate the area of the triangles.



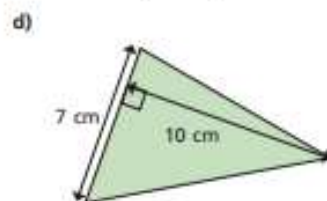
area =  cm<sup>2</sup>



area =  cm<sup>2</sup>

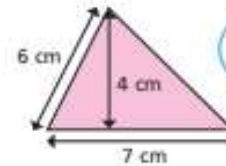


area =  cm<sup>2</sup>



area =  cm<sup>2</sup>

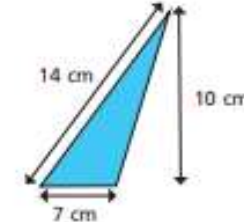
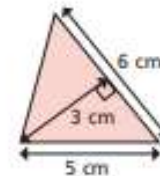
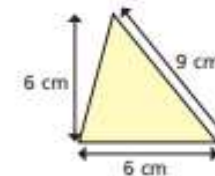
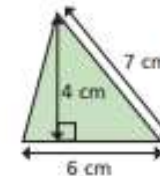
3 What mistake has Dora made?



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



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

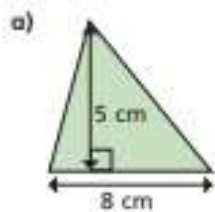


5 Are the statements always, sometimes or never true?

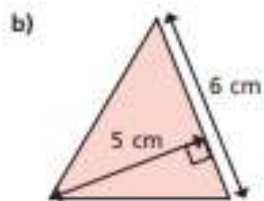
The side at the bottom of a triangle is the base.

The perpendicular height is equal to the vertical height.

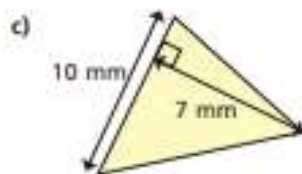
6 Calculate the area of the triangles.



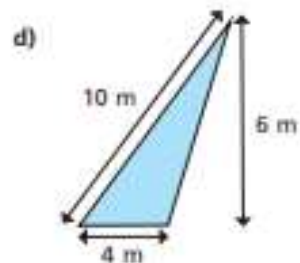
area =  cm<sup>2</sup>



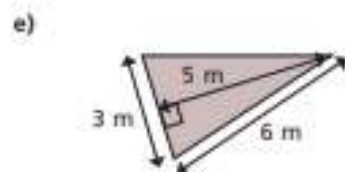
area =  cm<sup>2</sup>



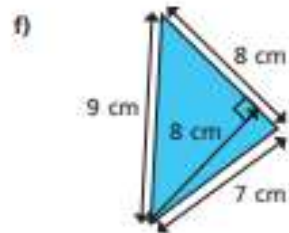
area =  mm<sup>2</sup>



area =  m<sup>2</sup>

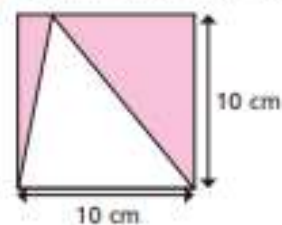


area =  m<sup>2</sup>



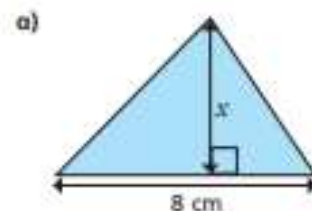
area =  cm<sup>2</sup>

7 Find the area of the shaded region.

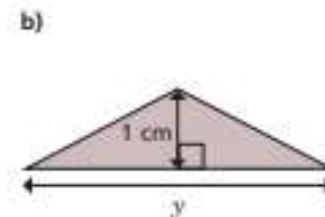


area =  cm<sup>2</sup>

8 The area of each triangle is 12 cm<sup>2</sup>. Find the missing lengths.

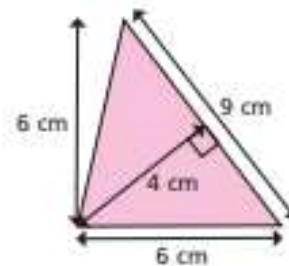


x =  cm



y =  cm

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



Compare answers with a partner.

# Year 6 Home Learning - Maths: Area of a parallelogram - Wednesday 1<sup>st</sup> July 2020

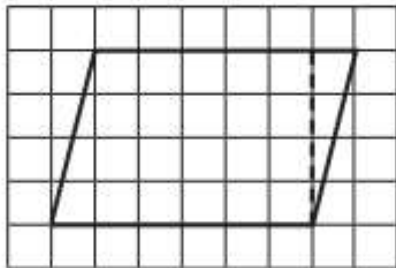
Please watch the video first: <https://vimeo.com/430339748>

## Area of a parallelogram

White  
Rose  
Maths



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



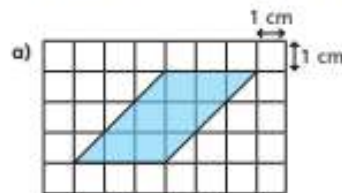
- a) Create a rectangle by cutting off the right-angled triangle and moving it.

- b) Complete the sentences.

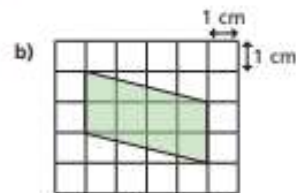
The area of the rectangle is  squares.

The area of the parallelogram is  squares.

- 2 Calculate the areas of the parallelograms.

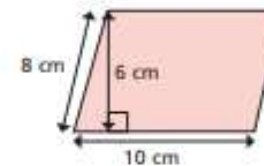


area =  cm<sup>2</sup>



area =  cm<sup>2</sup>

- 3 Huan is finding the area of the parallelogram.



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

- a) What mistake has Huan made?

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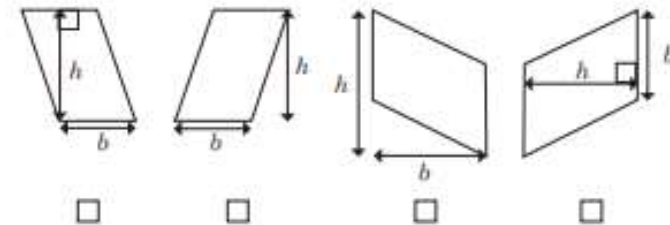
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- b) What is the correct answer?

area =  cm<sup>2</sup>

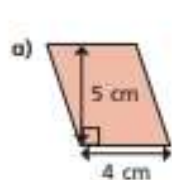
- 4 Esther has labelled the bases and heights for four parallelograms.

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

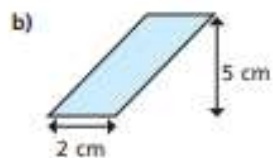


Explain to a partner why one is incorrect.

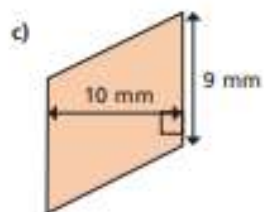
5 Calculate the areas of the parallelograms.



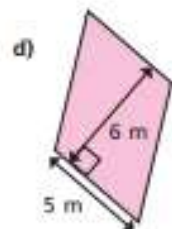
area =  cm<sup>2</sup>



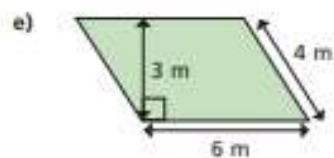
area =  cm<sup>2</sup>



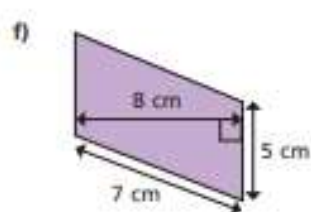
area =  mm<sup>2</sup>



area =  m<sup>2</sup>

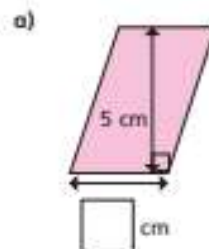


area =  m<sup>2</sup>

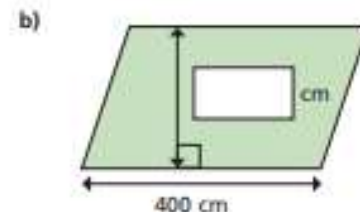


area =  cm<sup>2</sup>

6 Find the missing lengths.

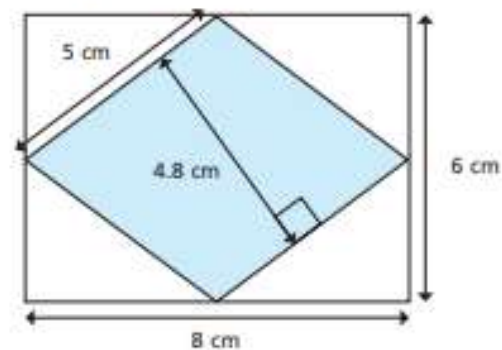


area = 15 cm<sup>2</sup>



area = 12 m<sup>2</sup>

7 Here is a rhombus inside a rectangle.



a) Calculate the area of the rhombus.

area =  cm<sup>2</sup>

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.



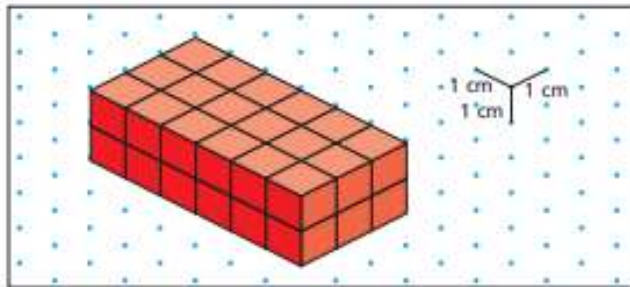
# Year 6 Home Learning - Maths: Volume of a cuboid - Thursday 2<sup>nd</sup> July 2020

Please watch the video first: <https://vimeo.com/430339843>

## Volume of a cuboid



1 Here is a cuboid made up of cubes.

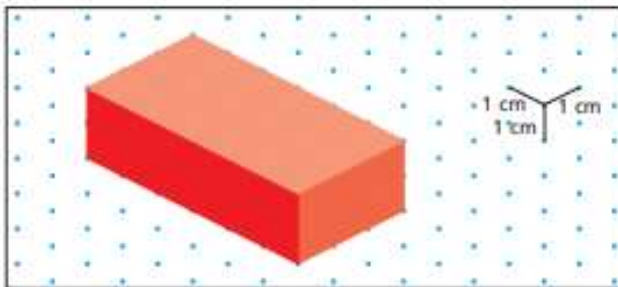


a) What is the volume of the cuboid?

volume =  cm<sup>3</sup>

b) Explain your method for finding the volume.

c) What is the volume of this cuboid?

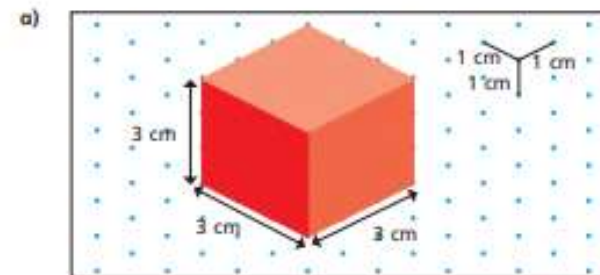


volume =  cm<sup>3</sup>

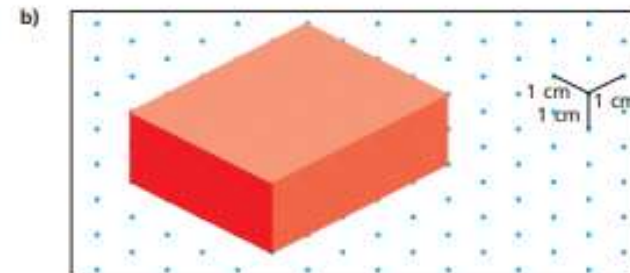
d) What is the same and what is different about the cuboids?

2 Find the volume of the cuboids.

You can make them with cubes if it helps.

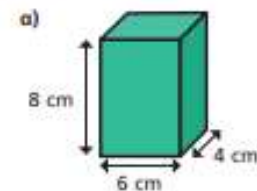


volume =  cm<sup>3</sup>

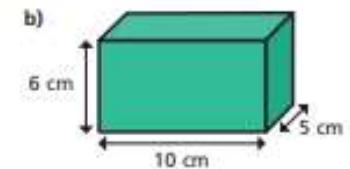


volume =  cm<sup>3</sup>

3 Calculate the volumes of the cuboids.

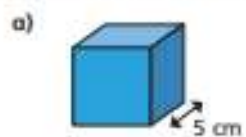


volume =  cm<sup>3</sup>

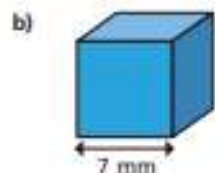


volume =  cm<sup>3</sup>

- 4 Calculate the volumes of the cubes.

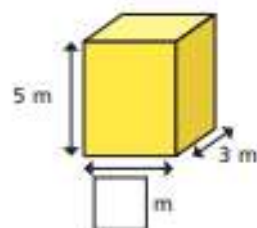


volume =   $\text{cm}^3$

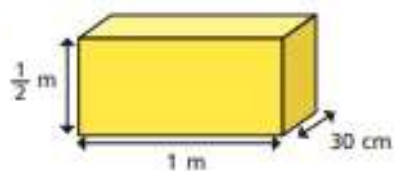


volume =   $\text{mm}^3$

- 5 The volume of the cuboid is  $60 \text{ m}^3$   
Find the missing length.

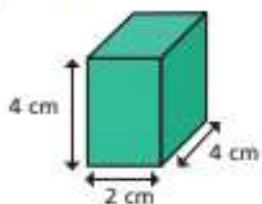


- 6 Calculate the volume of the cuboid.



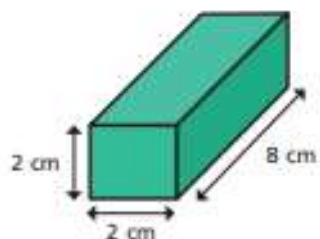
volume =   $\text{cm}^3$

- 7 a) Calculate the volumes of the two cuboids.



$\text{cm}^3$

What do you notice?

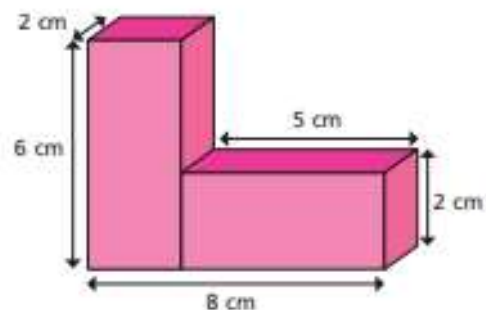


$\text{cm}^3$

- b) Draw two different cuboids that have a volume of  $24 \text{ cm}^3$



- 8 Calculate the total volume of the shape.



volume =   $\text{cm}^3$

Was there another method you could have used?



Ratio and proportion problems



1 Whitney buys 6 cans of lemonade for £3

a) How much do 12 cans cost?

b) How much do 3 cans cost?

c) How much do 15 cans cost?



2 The ratio of red to green grapes in a bowl is 3:1

a) Explain what this means.

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b) There are 12 more red grapes than green grapes.  
What is the total number of grapes in the bowl?

3 Amir is making some chocolate chip biscuits.

He has this list of ingredients to make 6 biscuits.

**Chocolate chip biscuits (makes 6)**

120 g butter

72 g sugar

180 g plain flour

60 g chocolate chips

a) How much of each ingredient does Amir need to make 2 biscuits?

butter  g

plain flour  g

sugar  g

chocolate chips  g

b) How much of each ingredient does Amir need to make 10 biscuits?

butter  g

plain flour  g

sugar  g

chocolate chips  g

c) Amir has 240 g of chocolate chips.

What is the maximum number of biscuits he can make?

- 4 Dexter has some 20p and 50p coins in a jar.  
For every three 20p coins he has one 50p coin.  
There are 12 coins in the jar in total.  
How much money is in the jar?

- 5 A drink is made using 3 parts orange juice to 2 parts lemonade.  
Esther makes 1.2 litres of this drink.  
How much orange juice does she need?

 ml

- 6 Two shops sell the same cereal but in different-sized boxes.

<b>Shop A</b> 500 g of cornflakes £2.10	<b>Shop B</b> 750 g of cornflakes £3.30
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Which shop is better value for money? Shop \_\_\_\_\_

Explain why.



- 7 Dora draws two similar rectangles.

My larger rectangle is  
4 times the size of the  
smaller one.



The perimeter of the  
larger rectangle is 48 cm.

The length and width of both rectangles are even numbers.  
What is the largest possible area for the small rectangle?

 cm<sup>2</sup>

- 8 Aisha has two boxes of sweets.
- In the first box, the ratio of red sweets to green sweets is 3 : 1
  - In the second box, for every 2 orange sweets there are 3 yellow sweets.
  - There is the same number of sweets in each box.
  - There are 12 yellow sweets in the second box.
- How many sweets are in the first box?