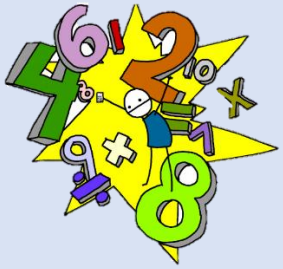
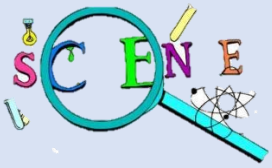
Year 4 Home-learning activities

Thursday 14th May 2020

Subject	Activity/Resource
English	**For today's English work I would like you to look at writing a plan for a story! You should have previously had a try at creating a setting and a main character (you might want to do this now quickly if you haven't already!) and these will feature in your story plan.** Attached to this Home Learning pack is a Plan document to help you. Remember: when we plan we write in short sentences and bullet points! The chance to write in long, flowing sentences and show off our amazing adjectives will come when we write the story! What you write about in your story is up to you but here are some ideas below if you are feeling a bit stuck: • A character on deserted island trying to get home. • A character in Space discovering and exploring new planets. • A main character discovers a time machine and uses it to go back in time (the Roman Empire?) or into the future (flying cars?). • You and a group of friends have a problem at school (or a club outside of school) and have to solve it as a team! • Your character is on a mission to find buried treasure in a jungle, forest, desert or the snowy Arctic! • Your character discovers they have a superpower. Will they use it for good or for bad? Good luck!

Maths 	Today's challenges look at perimeter and area. Do you remember what these are? ***Lesson 3*** – Perimeter of rectilinear shapes. ***Lesson 4*** – Area counting shapes. https://whiterosemaths.com/homelearning/year-4/ Work through the lessons and related activities for **Summer Term Week 4 (Lessons 3 and 4)** **REMEMBER…..There are videos online that teach these lessons!**
Topic	**We have looked at ways of conserving and protecting our environment for a number of weeks now, from big global changes and exotic animals to changes we see around us in our streets and animals we might see every day!** Change starts with us so it's important we start somewhere! Your task is to prepare a short speech that you will read to Mr Dove when we return to school about how Marvels Lane School could better protect the environment. It **only needs to be a short speech** so focus on one or two things which everyone at the school can help with. You may have your own thoughts after the research you have done recently but here are some ideas to help: • Not using one-use plastic in packed lunches • More people walking to school (less driving) • Meat-free school dinners for one day a week • More iPads at school so less paper is used/wasted
Science 	STEM Learning postcard - **DO TRY THIS AT HOME!** **See below for the next postcard! This time all you need is:** **- a hair comb** **- a water tap** You can check out more of these postcards here: STEM Learning

IMPORTANT TIPS TO REMEMBER:

- Write the date (DD/MM/YY) at the top of each piece of work you do.
- Write the title of the work underneath the date.
- If can, send me a photo of your work or if you can complete it on a computer, send the file to me so I can have a look at your work.
- If you have any issues with the work set, please email me straight away and I will try to get back to you as soon as possible.
- I will send the next set of work to you on Monday.
- This work is for you to do at your own pace. Please do not feel like you must complete everything straight away.

Story Plan	
Beginning: What happens at the beginning? Who are the main characters? Where is the setting?	•
Build up: What happens next? How does the story hint at a problem?	•
Problem: What problem(s) are your characters facing in this story?	•
Resolution: How this is problem sorted out/resolved? (This part of the story might contain some action!)	•
Ending: How does the story end? Is there a happy ending? Is there a plot twist at the end?	•

Eco-Warriors Speech- Sentence Starters

Here are some sentence starters that may help you with your short speech for Mr Dove. You do not have to use them but they are here if you need them!

Hello Mr Dove,

The environment issue I want to talk about today is…

This problem affects our environment because…

It is harmful to humans because…

Also, there are reasons it affects wildlife, such as…

To help stop this, in our school we could…

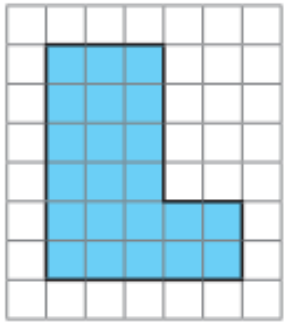
This idea would help our school/city/country/planet because…

Perimeter of rectilinear shapes

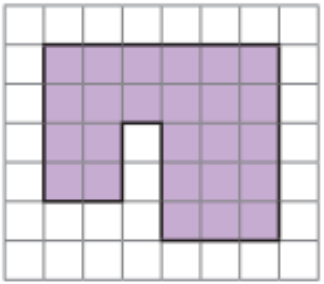
1 The length of each square on the grid is 1 cm.

Work out the perimeter of the shapes.

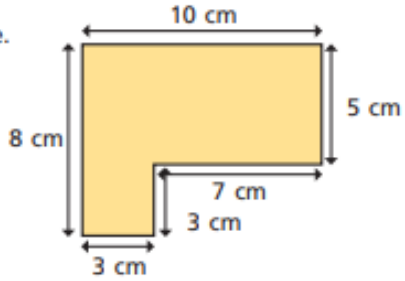
a)



b)

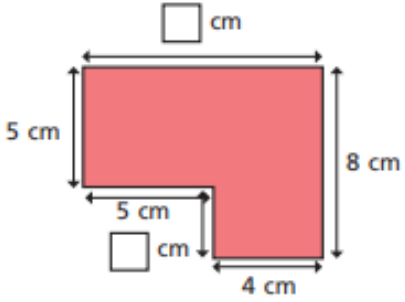


2 Work out the perimeter of the shape.



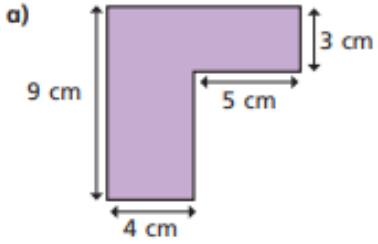
3 **a)** Work out the missing lengths.

b) What is the perimeter of the shape?

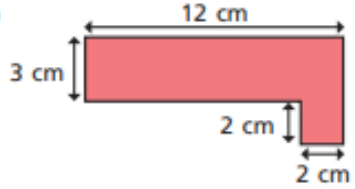


4 Work out the perimeter of each shape.

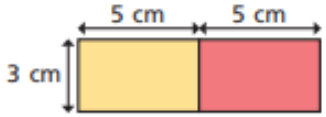
a)



b)



5 Mo puts two 5 cm by 3 cm rectangles next to each other.



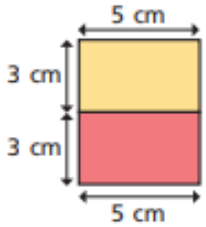
The perimeter of each small rectangle is 16 cm, so the perimeter of my larger rectangle must be 2 × 16 cm = 32 cm.

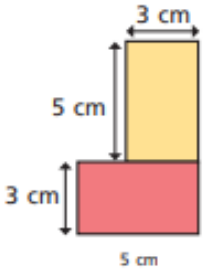
a) Is Mo correct?

Work out the perimeter of the larger rectangle to check your answer.

b) Mo puts the rectangles together in different ways.

Work out the perimeter of each large shape.

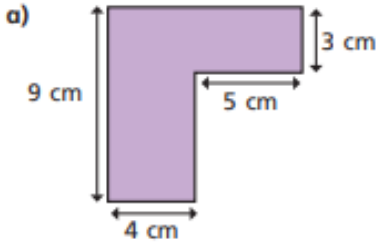




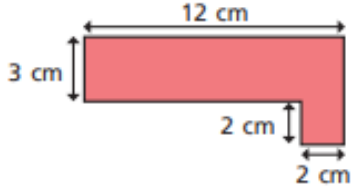
Perimeter of rectilinear shapes

4 Work out the perimeter of each shape.

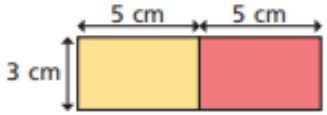
a)



b)



5 Mo puts two 5 cm by 3 cm rectangles next to each other.



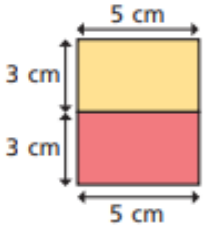
The perimeter of each small rectangle is 16 cm, so the perimeter of my larger rectangle must be 2 × 16 cm = 32 cm.

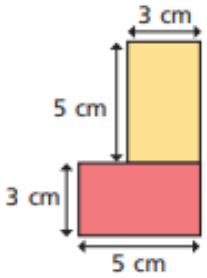
a) Is Mo correct?

Work out the perimeter of the larger rectangle to check your answer.

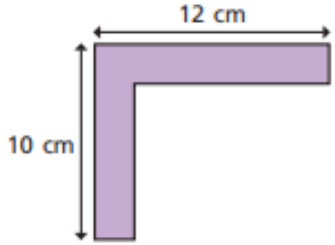
b) Mo puts the rectangles together in different ways.

Work out the perimeter of each large shape.





6 Dani thinks there isn't enough information to work out the perimeter of the shape.

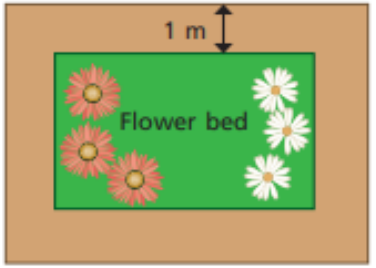


Is Dani correct?

Explain your answer.

7 A rectangular flower bed is 5 m long and 3 m wide.

The path around the flower bed is 1 m wide.



a) What is the perimeter of the flower bed?

b) What is the perimeter of the outside of the path?

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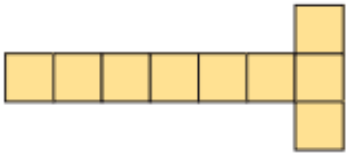
Counting squares

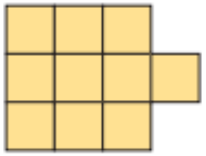
1 Count the squares in each shape to find the area.

A



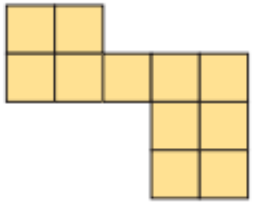
The area is ☐ squares.

B



The area is ☐ squares.

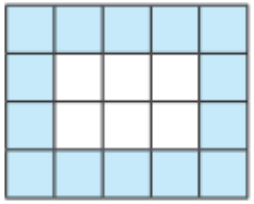
C



The area is ☐ squares.

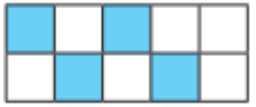
Which shape has the greatest area? _____

2 What is the area of the shaded part of the shape?



The area is ☐ squares.

3 Here is a kitchen tile.

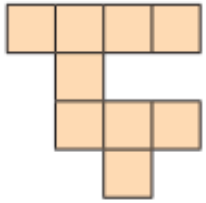


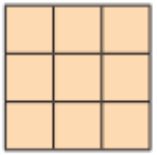
a) What area of the tile is blue? ☐ squares

b) What area of the tile is white? ☐ squares

c) What is the total area of the tile? ☐ squares

4 These two shapes are made up of squares of the same size.





Jack

These two shapes have the same area.

The first shape is bigger as it takes up more space.

Rosie

Who is correct? _____

Explain how you know.

_____

_____

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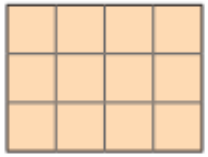
5 Here is a rectangle.

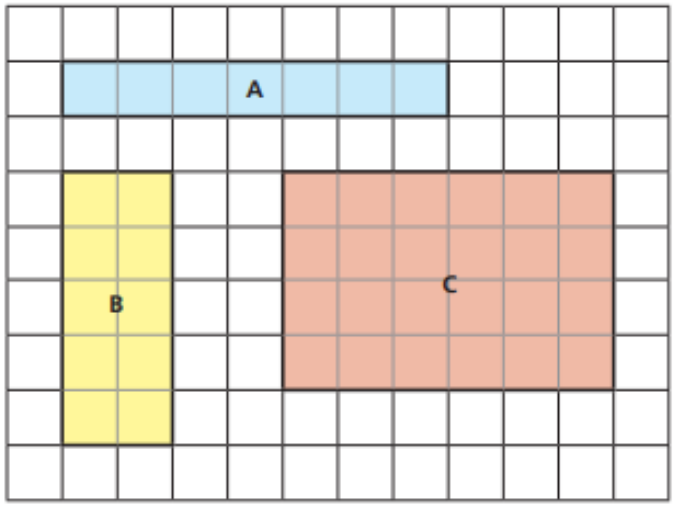


a) The rectangle has ☐ rows and ☐ columns.

b) What is the area of the rectangle? ☐ squares

c) How did you work out the area?

6 Find the area of each rectangle.



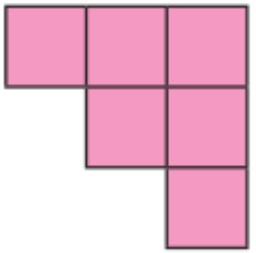
A = ☐ squares **B** = ☐ squares **C** = ☐ squares

7 Nijah and Eva are making shapes.

They each use 6 squares.

Nijah's shape

Eva's shape



The area of Nijah's shape is equal to the area of Eva's shape.

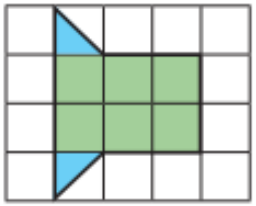
Is this true or false? _____

How do you know?

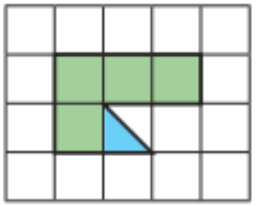
_____

_____

8 What is the area of each shape?



area = ☐ squares



area = ☐ squares

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DON'T TRY THIS AT HOME
#2
with Marvin
What you need:
· a nylon comb
· a water tap
Turn on the tap until you have a very thin stream of water.
Now grab your comb.
Vic Le Billon
Run the comb through your hair several times.
Slowly bring the comb towards the water, 10 cm below the tap.
When the comb is about 3 cm away, the water bends towards it!
Some objects, like hair and plastic, develop an electrical charge when rubbed together.
The charge in your comb attracts tiny electrical charges in the water molecules, pulling them towards it.
The End
www.physics.org keywords: electrostatics, charge