



Weekly learning pack

Year 6

English

Task 1

1. Read a set of instructions

- Read *Toast Instructions 1*
- What do you think is good about these instructions? Is there anything that could be improved?
- Read *Instructions Features*. Annotate and mark the text to show some of these features.

Task 1

Toast Instructions 1 - Delia Recipe

Ingredients

Brown or white bread, cut 1cm thick

1. Read a set of instructions

Equipment

A sharp serrated knife



Method

The key to slicing bread is to cut it using a sharp serrated knife. Use gentle, rapid sawing movements and do not to push down too hard on the loaf.

For toast, cut the bread into slices about 1cm thickness. The crusts can be on or off, depending on how you like them. Pre-heat the grill for at least 10 minutes before making the toast, turning it to its highest setting. Place the bread on the grill rack and position the tray 10cm from the heat source. Allow the bread to toast on both sides to pale or dark golden brown.

While that's happening, keep an eye on it and don't wander far away. When the toast is done, remove it immediately to a toast rack. Why a toast rack? Because they are a brilliant invention. Freshly made toast contains steam, and if you place it upright, with the air circulating, the steam escapes and the toast becomes crisp and crunchy. Putting it straight on to a plate means the steam is trapped underneath, making it damp and soggy.

Always eat toast as soon as possible after that, and never make it ahead of time. Never ever wrap it in a napkin or cover it (the cardinal sin of the catering trade), because the steam gets trapped and the toast goes soggy. Always use good bread, because the better the bread the better the toast. It is also preferable if the bread is a couple of days old.

from: <https://www.deliaonline.com/recipes/type-of-dish/bread-recipes/perfect-toast>

Task 1

Instruction Features

Purpose – tells how to do or make something

Range – Non-fiction book, recipe, science experiment, instruction on packaging, poster or sign, manual, craft patterns.

- **Title** which says what will be achieved
- List of **ingredients** or **equipment** needed
- **Step by step** actions
- Labelled **illustrations**
- **Bullet points** or **numbered lists**
- Clear, **concise** vocabulary and sentence structures
- Present-tense **imperative verbs** (e.g. Mix the flour, Cut along the line, Press the controller)
- Clear statements of **quantities, measurement and other details**
- Descriptive language used for **clarity** rather than vividness or effect
- **Adverbials** (numbers or time connectives) used to show stages in a process

Task 2

2. Looks for features in sets of instructions

- Fill in *Instruction Checklist* for *Toast Instructions 1*.
- Now read *Toast Instructions 1* and *2* and fill in *Instructions Checklist*.
- You could challenge yourself to read *Toast Instructions 3* and to fill in the checklist for this article as well.

Task 2

Snipping Tool				
File Edit Tools Help				
<u>Instructions Checklist</u>				
	1	2	3	4
Title which says what will be achieved				
List of ingredients or equipment needed				
Step by step actions 2. Looks for features in sets of instructions • Fill in <i>Instruction Checklist</i> for <i>Toast Instructions 1</i> .				
Labelled illustrations • Now read <i>Toast Instructions 1</i> and <i>2</i> and fill in <i>Instructions Checklist</i> . • You could challenge yourself to read <i>Toast Instructions 3</i> and to fill in the				
Bullet points or numbered lists checklist for this article as well.				
Clear, concise vocabulary and sentence structures				
Imperative verbs (e.g. <u>Mix</u> the flour, <u>Cut</u> along the line, <u>Press</u> the controller)				
Clear statements of quantities, measurement and other details				
Descriptive language used for clarity rather than vividness or effect				
Adverbials (numbers or time connectives) used to show stages in a process				

Task 2

Toast Instructions 1 - Delia Recipe

Ingredients

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1. Read a set of instructions

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from: <https://www.deliaonline.com/recipes/type-of-dish/bread-recipes/perfect-toast>

Task 2

Toast Instructions 2 - Jamie Oliver Recipe

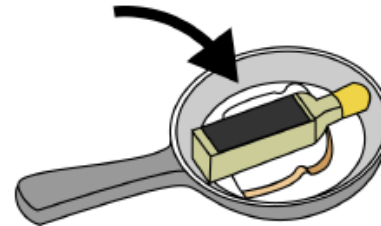
Toast is wonderful, humble food. Some people think toast is just toast – but not in my house. There are a million options. How about toast on a barbecue, where the smokiness takes it to a new level? We all like Marmite in our family, but sometimes I have a ripe tomato and a bit of salt on toast. In the past, I have turned the toaster on its side, put cheese on bread and slid it in so it toasts on one side and melts on the other. It's a bit of a jiggle but it works. There is a divide in our family about how to make toast on an Aga. My Mrs likes to put the bread on the hot side in an Aga toaster, so you get funny little white lines – pointless, in my opinion. I put the bread on the cooler side so it gets super crispy. But my favourite way of making toast is in a frying pan. Here's how:

1. Sourdough, which is spongy, toasts up a treat. It stays fresh for a week and then you can grill it for bruschetta or dry it out for what the Italians call pangritata to liven up stews, soups and salads. We waste about 40% of bread in Britain but once you've tasted pangritata you'll never throw bread away again. Put a slice in a hot, dry non-stick pan and cook for a minute and a half on each side or until golden and crisp. I do it by smell – the equivalent of roasting coffee beans. Press the bread down with a flat bottle.

2. After I've toasted one side, I like to turn it over and put something heavy on the bread – try a bottle of HP sauce – to squash it flat. It ensures the entire surface area is toasted for maximum crunch.

Make sure your butter is at room temperature.

3. Get the butter or marg on straight away. I am a butter person and really good butter is always a pleasure. Make sure it is at room temperature – it's a pain if your toast goes cold while you're trying to spread it.



Then your toast awaits your next embellishment: a nice bit of jam or Marmite.

4. How I cut toast depends on my mood. I like soldiers if I am nostalgic or have an egg to dip into. Cutting toast into rectangles is belt and braces when I am in a rush. But if I want to be more upmarket, I'll cut it into triangles. I don't cut off the crusts because a) it's a waste and b) most of the nutrients of any bread are in the crust. Plus, I like the contrast of the soft and the crunchy bits, but, if you want to be wussy, you can cut 'em off.

Task 2

Toast Instructions 3 - How To Make Perfect Toast

Scientists revealed the mathematical formula for a perfect slice of toast, showing that it is best cooked for exactly 216 seconds.

A team of researchers carried out a study which found the optimum thickness is 14mm and the ideal amount of butter is 0.44 grams per square inch.

The recommended cooking time gives the slice a 'golden-brown' colour and the 'ultimate balance of external crunch and internal softness'.

It has the look of 'builder's tea' and, crucially, the outside is 12 times crunchier than the middle.

The result is achieved by setting the toaster dial to 'five out of six' on a typical 900-watt appliance to produce a temperature of 154 degrees Celsius, the study revealed.

Bread expert Dr Dom Lane, a consultant food researcher, spent one week toasting and tasting a staggering 2,000 slices for his research, in his bid to assist the nation's toast eaters.

During his exhaustive study, commissioned by bread maker Vogel's, Dr Lane used a complex formula to help determine the toasting required to produce the perfect level of crispiness.

He found that 216 seconds was the exact amount of time needed to toast the outside to the desired level before the golden 12:1 exterior/interior crispiness ratio was lost.

He also discovered it was best to use a pale, seeded, loaf, taken fresh from the fridge at a temperature of 3 degrees Celsius.

Both sides of the bread should be cooked at the same time, using a toaster rather than a grill, to help 'curtail excessive moisture loss'.

It should then be buttered as soon as it pops up, before the slice loses the heat required to melt the spread.

Task 3

3. Now for some writing

- Write your own set of instructions about something that you know well.
- It could be another piece of cooking, a sport or video-game, music, art or anything at all. Use *Instruction Features* to help you as you write.

Well done! Share your writing with a grown-up. Show them the features that you have included.

Task 3

Instruction Features

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Task 4

Try the Fun-Time Extras

- Can you find a recipe that you could try out at home?
- Can you learn a new skill with instructions from a book or the internet?
You could use www.wikihow.com . Who could you share your new skill with?

Maths

For the following maths slides, there is an online lesson and answers that you can find at:

<https://whiterosemaths.com/homelearning/year-6/>

Task 1

Area and perimeter

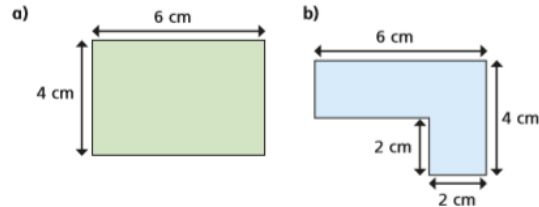
1 Use the words to complete the sentences.

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 _____

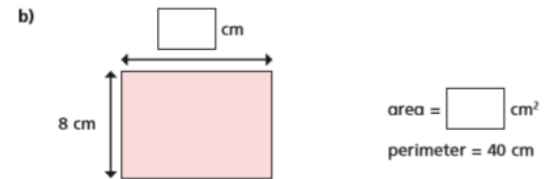
2 Work out the areas and perimeters of the shapes.



perimeter = cm
area = cm^2

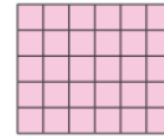
perimeter = cm
area = cm^2

3 Work out the missing values.



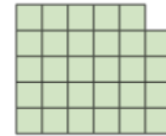
4 Work out the areas and perimeters of the shapes.

Shape A



area = cm^2
perimeter = cm

Shape B



area = cm^2
perimeter = cm

What do you notice?

Watch Lesson:

Lesson 1 in the Week 9 Section

Task 1

5



Tommy

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

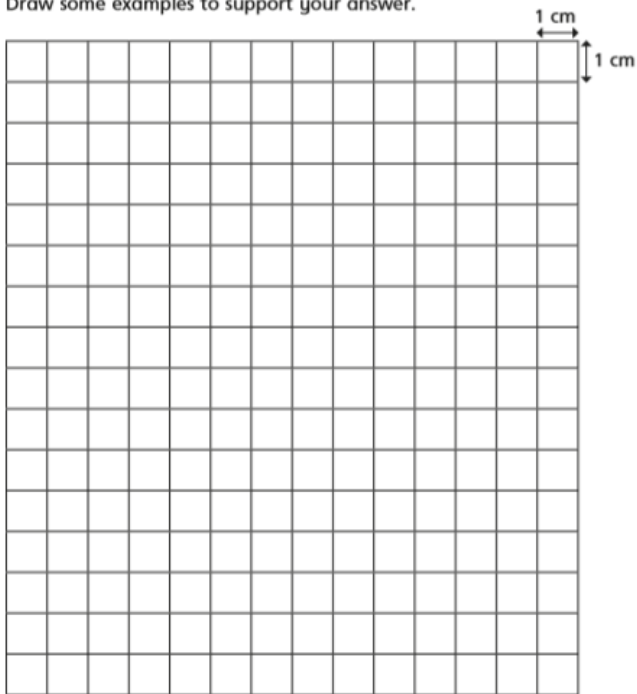
Amir



It depends on the shape.

Who do you agree with? _____

Draw some examples to support your answer.

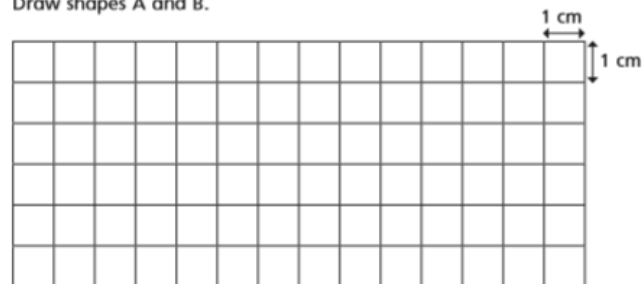


6

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.



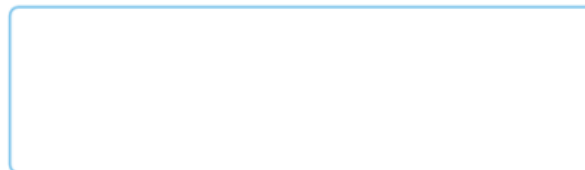
What do you notice?

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.



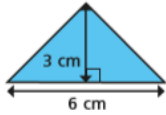
- b) What is the greatest possible area of the enclosure?

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

Task 2

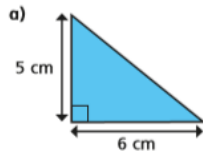
Area of a triangle (3)

1 Calculate the area of the triangle.

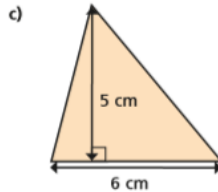


area = cm²

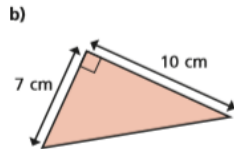
2 Calculate the area of the triangles.



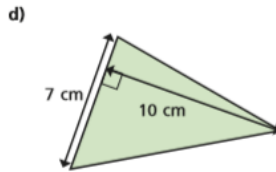
area = cm²



area = cm²

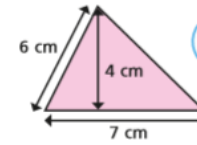


area = cm²



area = cm²

3 What mistake has Dora made?

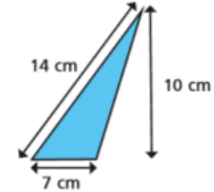
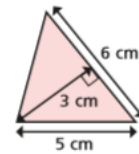
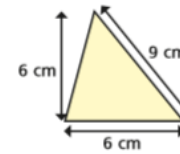
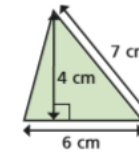


To find the area you do $7 \times 6 \div 2 = 21 \text{ cm}^2$



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.

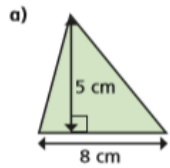
The perpendicular height is equal to the vertical height.

Watch Lesson:

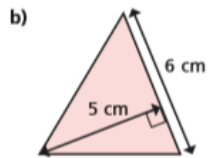
Lesson 2 in the Week 9 Section

Task 2

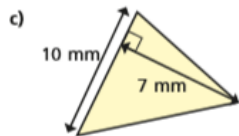
6 Calculate the area of the triangles.



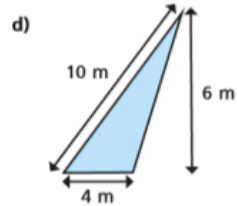
area = cm²



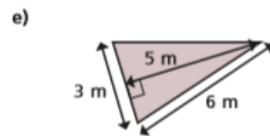
area = cm²



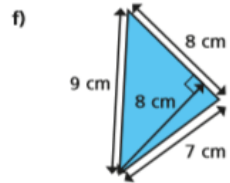
area = mm²



area = m²

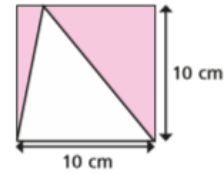


area = m²



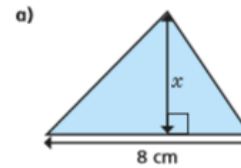
area = cm²

7 Find the area of the shaded region.

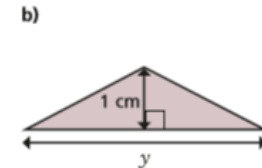


area = cm²

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

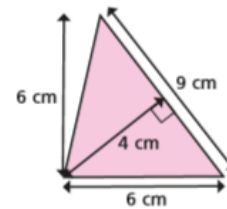


$x =$ cm



$y =$ cm

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



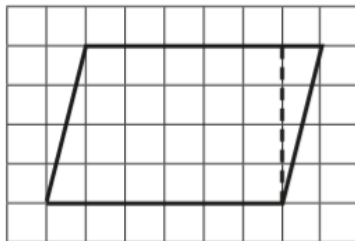
Compare answers with a partner.

Task 3

Area of a parallelogram

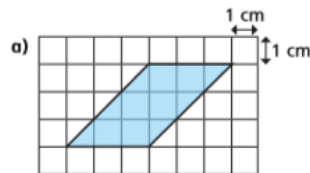


- 1 On a piece of squared paper, copy this parallelogram and cut it out.

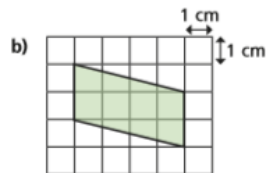


- a) Create a rectangle by cutting off the right-angled triangle and moving it.
- b) Complete the sentences.
 The area of the rectangle is squares.
 The area of the parallelogram is squares.

- 2 Calculate the areas of the parallelograms.

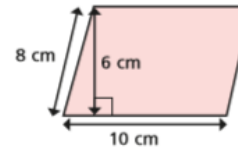


area = cm²



area = cm²

- 3 Huan is finding the area of the parallelogram.



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

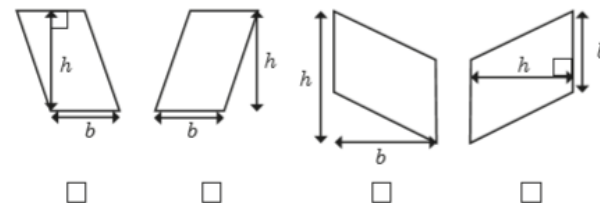
- a) What mistake has Huan made?

- 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.



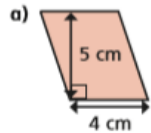
Explain to a partner why one is incorrect.

Watch Lesson:

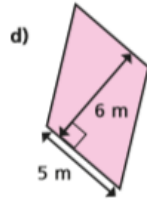
Lesson 3 in the Week 9 Section

Task 3

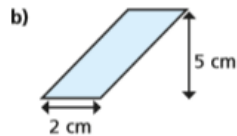
5 Calculate the areas of the parallelograms.



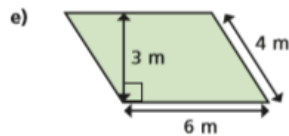
area = cm²



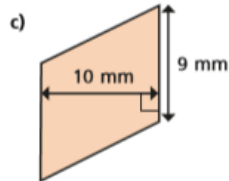
area = m²



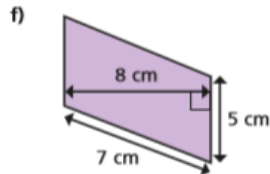
area = cm²



area = m²

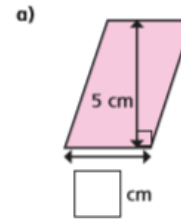


area = mm²

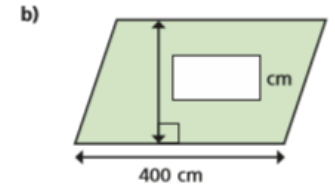


area = cm²

6 Find the missing lengths.

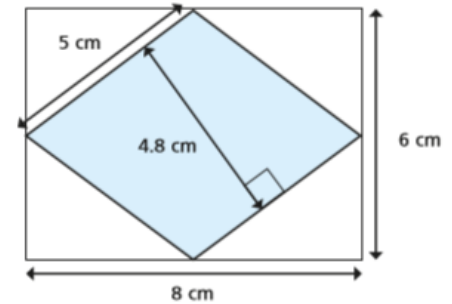


area = 15 cm²



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.



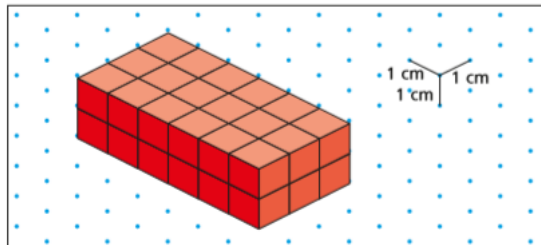
Explain to a partner why Mo is wrong.

Task 4

Volume of a cuboid

White
Rose
Maths

1 Here is a cuboid made up of cubes.

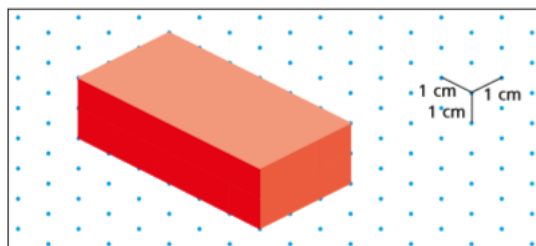


a) What is the volume of the cuboid?

volume = cm³

b) Explain your method for finding the volume.

c) What is the volume of this cuboid?

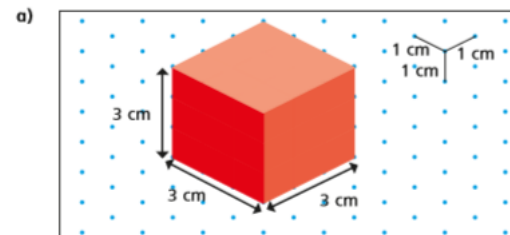


volume = cm³

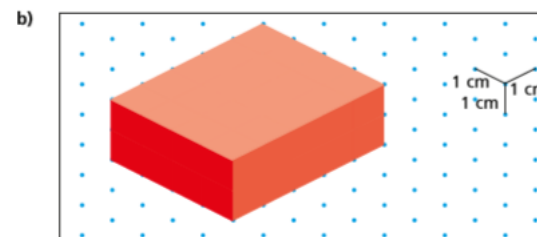
d) What is the same and what is different about the cuboids?

2 Find the volume of the cuboids.

You can make them with cubes if it helps.

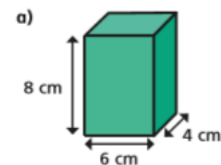


volume = cm³

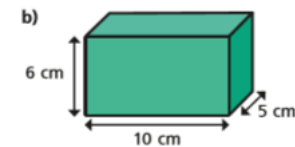


volume = cm³

3 Calculate the volumes of the cuboids.



volume = cm³



volume = cm³

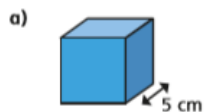
© White Rose Maths 2011

Watch Lesson:

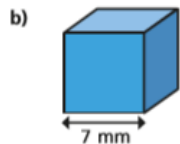
Lesson 4 in the Week 9 Section

Task 4

4 Calculate the volumes of the cubes.

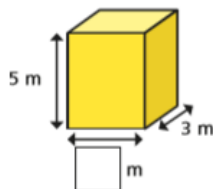


volume = cm^3

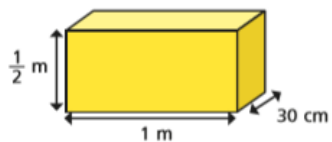


volume = mm^3

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

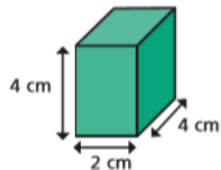


6 Calculate the volume of the cuboid.



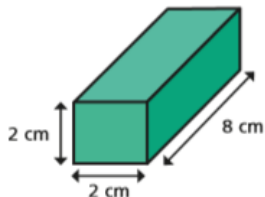
volume = cm^3

7 a) Calculate the volumes of the two cuboids.



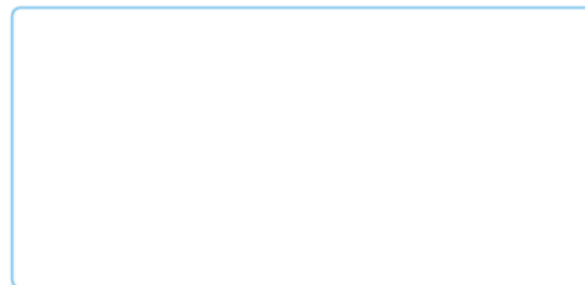
cm^3

What do you notice?

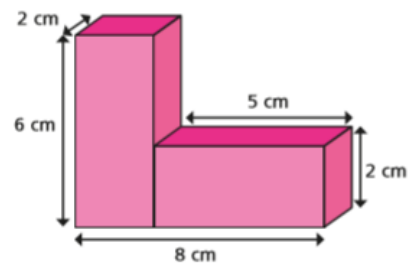


cm^3

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



8 Calculate the total volume of the shape.



volume = cm^3

Was there another method you could have used?



Curriculum (Geography)

Task 1

Yara is trying to decide whether or not to move from her rural village to the urban city of Rio de Janeiro. Here are all of the reasons she can think of for **STAYING** in her village.

The city has a higher level of crime and drug abuse - I do not want my children to be affected by this.

I have had no training or chance to develop skills in anything other than farming - it might be hard for me to find another job in the city.

My husband lives in the city. He has a job and sends us money whenever he can afford it. This helps us a lot.

I know everyone in my village. My friends and family are here.



The city is overcrowded. I like the space, peace and quiet of the countryside.

It will cost a lot of money for us to make the move to the city.

The government is starting to invest more money in the area where my village is, to improve our standard of living.

I might have less time to spend with my children if I get a job in the city.

My children love to play outdoors in our village. I know that they are safe there.

Can you think of any other reasons why Yara might want to stay in her village?

I grew up in this village. My family have always lived in this area.

Task 1

Yara is trying to decide whether or not to move from her rural village to the urban city of Rio de Janeiro. Here are all of the reasons she can think of for **MOVING** to the city.

My husband already lives in the city. It would be nice for the family to be together again.

The government are starting to help some people who have moved to the city with finding or improving housing.

I want to give my children a better life, and be able to buy them things like toys and books.

Living in a bright, busy city will be exciting. There will be lots more to do and see than in the village.



Lots of people live in the city. The children and I will meet many people and make new friends.

There would be better job opportunities and I could earn more money in the city.

I am scared that my children will get sick. Here in the village there is little health care, but in the city there are doctors and hospitals.


It will be an exciting new start for our family.

My children would have a better education and more opportunities for their future.

Can you think of any other reasons why Yara might want to move to the city?

My new home might have electricity and running water.

Task 1




First, sort the Push and Pull Factor Cards into two piles. Then, put each pile in order of importance according to how strong you think the push or pull factor is, and stick them in the correct columns below.

PUSH FACTORS	PULL FACTORS

↑ MOST IMPORTANT FACTOR

↓ LEAST IMPORTANT FACTOR

Can you think of any positive factors for staying in the village?



Can you think of any negative factors for moving to the city?

Science

To explore what micro-organisms are
and how they can be grouped.

Task 1

A micro-organism is living thing that is too small to be seen with the naked eye. In order to see micro-organisms we have to use powerful microscopes. Micro-organisms include bacteria, fungi and viruses.



This picture shows what bacteria look like when they are magnified to be thousands of times bigger than their actual size.



Task 1

Just like plants and animals, micro-organisms need certain things to survive. They need water and food but some create their own food, like plants do, while others feed off the objects around them. Some also need oxygen. Different types of micro-organisms can survive in different places. Some live in freezing conditions, others in boiling hot temperatures.



Micro-organisms are just as varied as plants and animals, if not more so.

Task 1

We can see the evidence of micro-organisms all around, even if we can't actually see the microbes themselves. Can you guess how these pictures show evidence of micro-organisms?



Task 1

There are billions of microbes on and in your body. Most of these microbes are necessary for us to stay healthy. However, some microbes get into our systems and cause us to become ill. These microbes can then travel from person to person, making lots of people poorly. These diseases can range from mild illnesses like colds and chicken pox to much more harmful illnesses like food poisoning, cholera, hepatitis and many, many more.



These diseases can be spread through coughs, sneezes and dirty surfaces, which is why it is so important to wash your hands and keep surfaces clean.

Task 1

Microbes are why foods rot and go mouldy. Even though it isn't very nice seeing or smelling mouldy food, having foods broken down by micro-organisms is very important. The mould you can see on food is the fungi feeding and growing.



Eating mouldy food can make you very ill.

Task 1



However, some moulds are specifically cultivated to make food, such as the blue veins in blue cheese. These moulds are safe to eat.

Micro-organisms are also used a lot in other types of food production. Cheese and yogurt, for example, use lactic acid to turn them into these products from milk. Wine and beer need yeast to be brewed. Bread needs yeast to make it rise.



Task 1

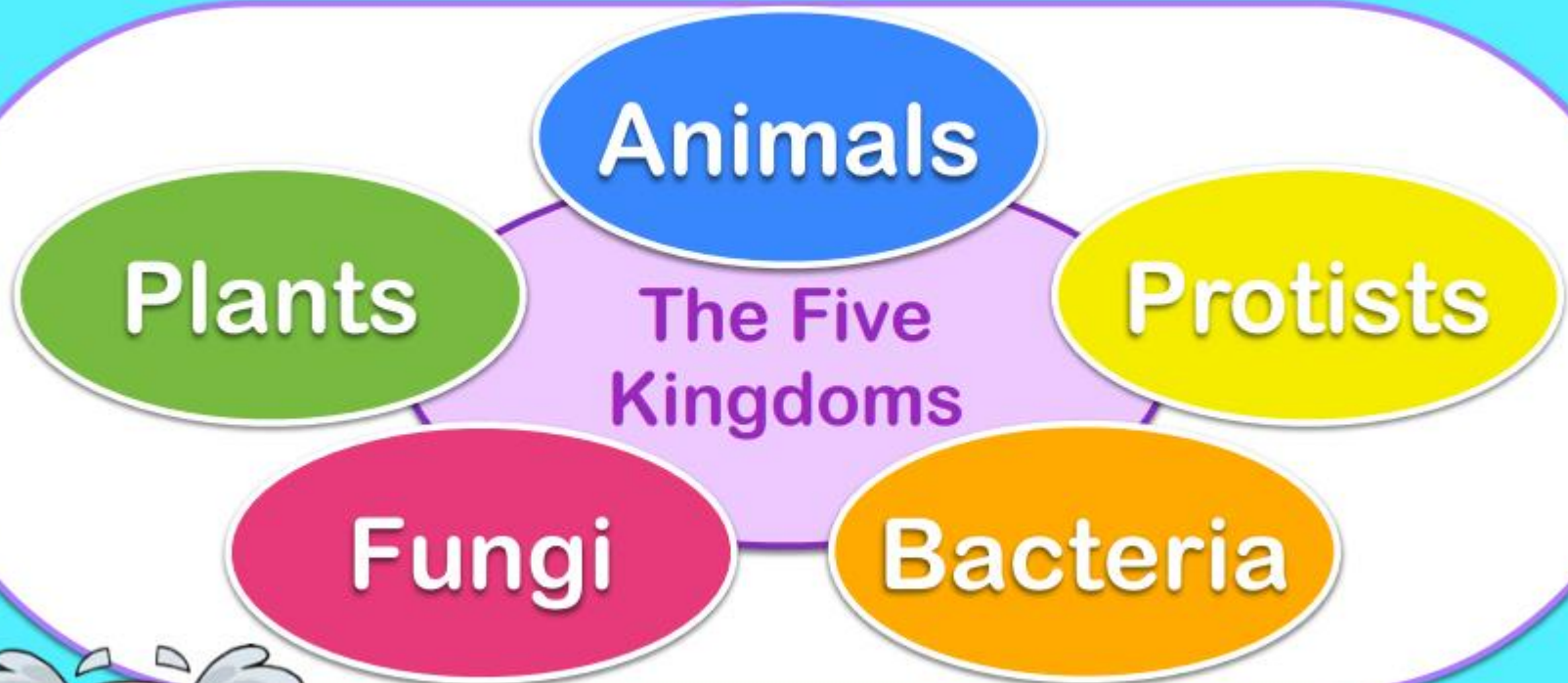
The holes in bread are air bubbles.

These bubbles are produced by yeast. Yeast is a micro-organism that is used in bread-making to make the bread rise. The yeast feeds on the bread and then produces CO_2 gas which forms the air bubbles. The more the yeast feeds on the dough, the more gas will be produced and the more the bread will rise.



Task 1

As we have seen, there are lots of different types of micro-organism and they need to be classified, just as plants and animals are.



Let's have a look at the differences between fungi, bacteria and protists...

Task 1

Protists

Protists are micro-organisms that are usually made up of just one cell. Protists usually live in water and stay in one place. They can include algae and amoeba.

Fungi

Fungi need to absorb nutrients from their surroundings to survive. Examples of fungi includes mushrooms, mould and yeast.

Bacteria

Bacteria form the largest group of any kingdom by far. Bacteria can be used in food production, such as to turn milk into yoghurt. They can also cause diseases.

Task 1

Use the information on the slides to answer the questions on the next slide.

Task 1

WHAT ARE MICRO-ORGANISMS?

WHAT DO MICRO-ORGANISMS
LOOK LIKE?

HOW ARE MICRO-ORGANISMS
GROUPED?

HOW CAN MICRO-ORGANISMS
BE HELPFUL?

HOW CAN MICRO-ORGANISMS
BE HARMFUL?

RE

Think back to the lesson about
Greater Jihad and what this means to
Muslims.

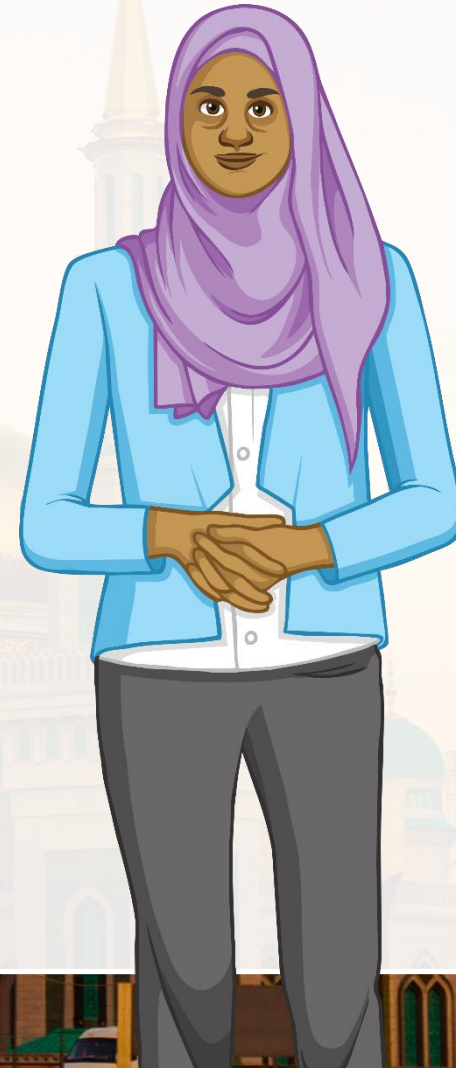
Greater Jihad

Muslims believe that we must constantly struggle to behave in the way God commands us to.

Though Allah has made his commands to us clear in the Qur'an, even the holiest person will sometimes find them hard to follow. We may fail to be the best person we can be because of factors such as:

- Temptation
- Greed
- Forgetfulness

Greater jihad is the constant struggle to ignore these distractions and be the people God wants us to be.



Lesser Jihad

Lesser jihad is very different to greater jihad. It involves fighting against others who have wronged you.

This form of jihad is sometimes misused by people to justify intolerance and unacceptable behaviour such as terrorism.

As you will see, lesser jihad cannot be used to justify these things.



Lesser Jihad

Before we look at lesser jihad in detail, let's think about our views on war.

'It is never acceptable to fight in a war.'

Agree

Disagree

What do you think? What do other people in your household think?

Lesser Jihad

When is it acceptable to fight lesser jihad?

Jihad is the idea of struggle.

There are two types of jihad:

- Greater jihad: struggle against oneself to avoid temptation and sin.
- Lesser jihad: armed struggle or holy war.



Lesser Jihad

There are many conditions a war must meet if it is to count as lesser jihad. These include:

- it should only be fought in self-defence, to prevent injustice or to defend other Muslims;
- it cannot be fought for profit, to gain territory or for similar motivations;
- civilians must not be harmed;



Lesser Jihad

- Enemies who surrender must not be harmed and should be forgiven;
- The environment or a country's resources should not be destroyed.
- Holy buildings (for example churches) should be respected.



Task 1

Immam Discusses Ummah and Jihad.

Watch the clip above and then explain the two different jihads, how Muslims interpret them and how it influences the way they live their lives.