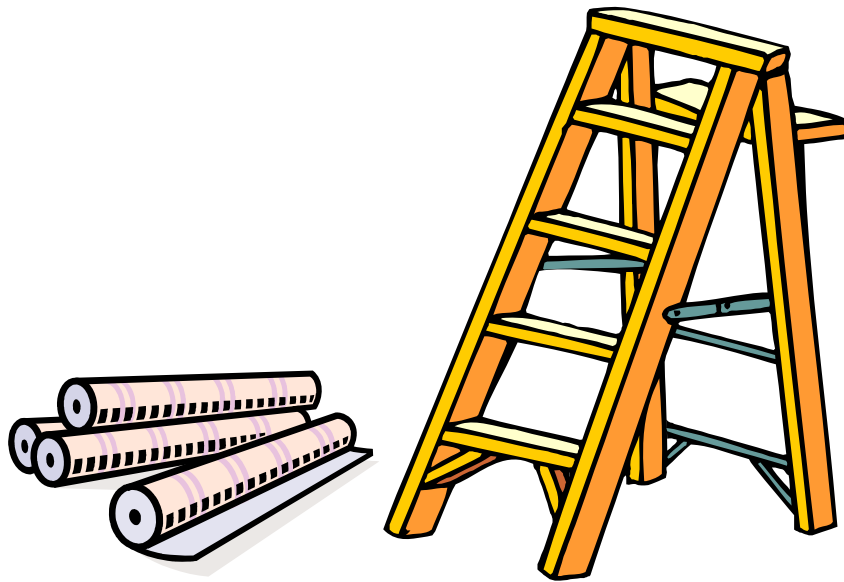


DEVELOPING WALLPAPERING SKILLS



NUMERACY ENTRY 2 MEASURE AND SHAPE

Student Name _____

Group _____

Start Date _____ End Date _____

1. Be familiar with equipment and materials

Recognise and name common 2D and 3D shapes and describe their properties, using appropriate vocabulary 4-1, 2, 3, 4

Names of 2D shapes

- Rectangle
- Circle
- Square
- Triangle

Flat Shapes

All these shapes are 2D (2 dimensional).

This means that they are flat but not deep.

Ask your tutor for some 2D shapes to explore.

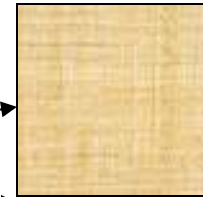
Trace the shape with your finger and feel the corners.

Fill in the following information:

The shape of this sandpaper is a

It hassides.

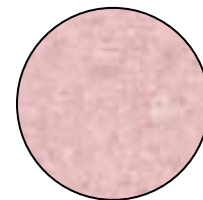
It has corners.



The shape of this paint tin lid is a

It hasside.

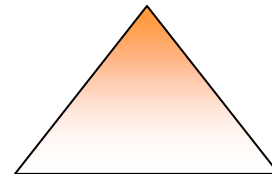
It has corners.



The shape of this scraper is a

It hassides.

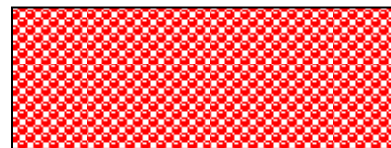
It has corners.



The shape of this sheet of wallpaper is a

It hassides.

It has corners.



Which shape is the only one with a curved side?

.....

What is special about the square?

.....

1. Be familiar with equipment and materials

Recognise and name common 2D and 3D shapes and describe their properties, using appropriate vocabulary 5-1,2, 3, 4,5

- Names of 3D shapes
- Cylinder
 - Cuboid
 - Pyramid
 - Cube

Solid Shapes

All these shapes are 3D (3 dimensional).

You can measure them from all sides.

Ask you tutor for some 3D shapes to explore.

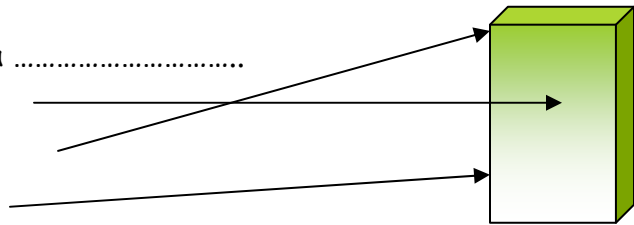
Trace along the edges with your finger, feel corners and lay your hand flat against the faces of the shapes. Fill in the information below.

The shape of this box of paste is a

It hasfaces.

It hascorners.

It hasedges.



The shape of this roll of wallpaper is a

It hasfaces.

It hascorners.

It hasedges.

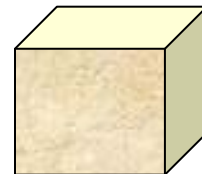


The shape of this sponge is a

It hasfaces.

It hascorners.

It hasedges.

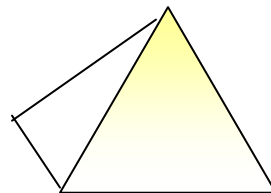


The shape of this teabag is a

It hasfaces.

It hascorners.

It hasedges.



Which shape has no corners and the faces are not flat?

.....

What is special about the cube?

.....

.....

1. Be familiar with equipment and materials

Recognise and name common 2D and 3D shapes and describe their properties, using appropriate vocabulary 5-1, 2, 3, 4, 5

Remember: you cannot see all the sides, corners, and faces of these shapes on this page. Use your tools and material to explore further.

In your workshop there are all sorts of shaped boxes and material.

Choose 2 tools and explain to your tutor what you know about their shape. (For example - side of a box of adhesive, tin of paint, a roll of wallpaper, sandpaper)

	Item shown	Tutor signature	Date
1			
2			

Sort the following tools into their shapes.

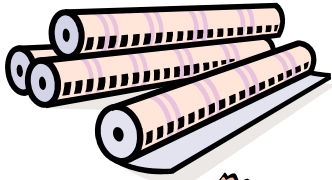
Tick the correct box for each shape.

Add some more tools to the list.

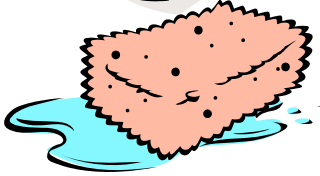
Items	2D Shape	3D Shape
Top of a pasting table		
Bucket		
Roll of wallpaper		
Sponge		
A piece of cut wallpaper		
Box of adhesive		

1. Be familiar with equipment and materials

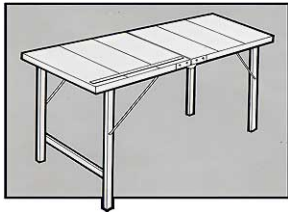
Recognise and name common 2D and 3D shapes and describe their properties, using appropriate vocabulary 5-1, 2, 3, 4, 5



What shape are these rolls of wallpaper?.....
How many rolls are there?



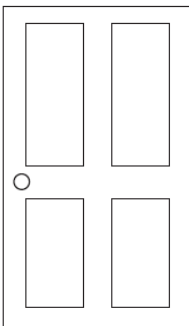
What is the shape of this sponge?
How many faces does it have?



What shape is the top of the pasting table?
How many corners does it have?.....



Look at this room.
What shape is it?
What other shapes can you see inside the room?



Look at this drawing of a door.
What shape is it?

How many other shapes can you see?

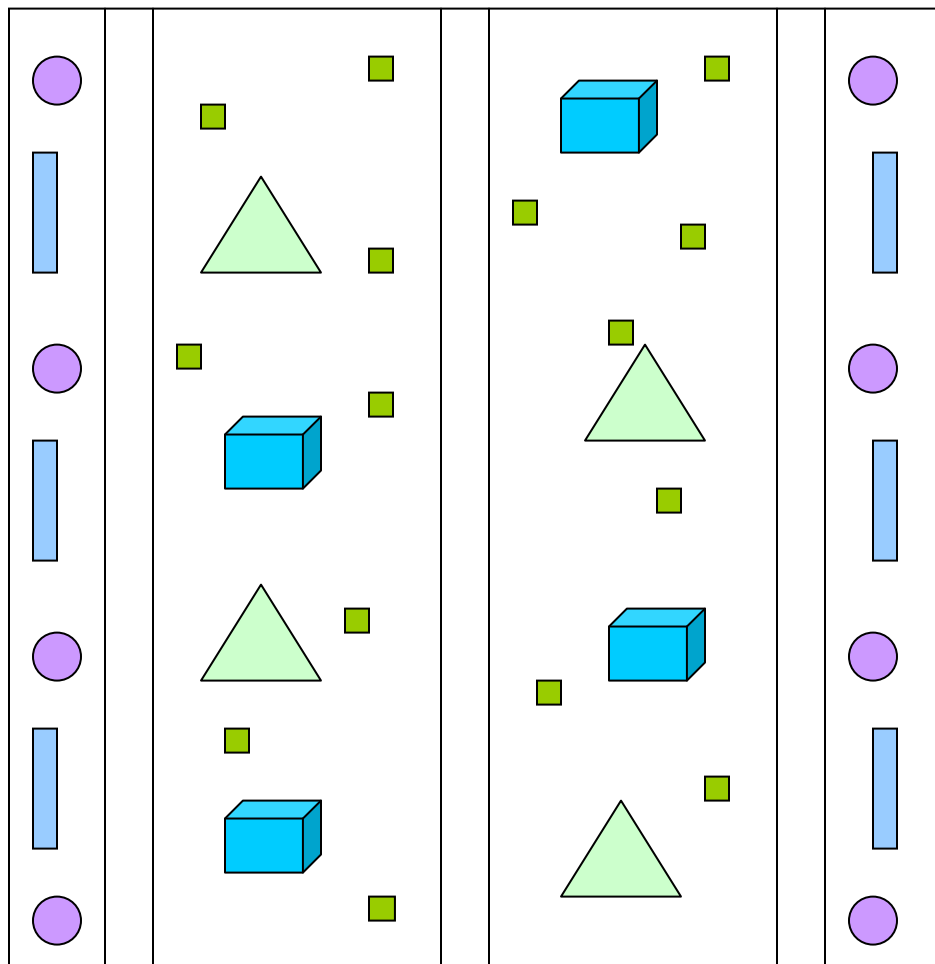
What shape is the door knob?

1. Be familiar with equipment and materials

Recognise and name common 2D and 3D shapes and describe their properties, using appropriate vocabulary 5-1,2,3,4,5

How many of each different shape can you see in this wallpaper?

Name of Shape	How many of each shape
Circles	



Plan and prepare for the project

Estimate, measure and compare length using common standard and non standard measures (metres and centimetres) 1-1,2,3,4,5,6,7

Measure Length

Remember:

- A metre is a STANDARD measure of length used across the world.

Remember:

- Metres and centimetres are metric units
- 1 metre = 100 centimetres
- Centimetre is written cm
- Metre is written m

Before you start decorating you may need to estimate the size of a space.
Why is this important?

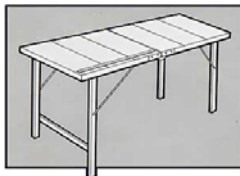
You could estimate to the nearest metre, $\frac{1}{2}$ metre, centimetre or 10 centimetres.

How many centimetres are there in 1 metre?

Ask your tutor for some measuring tools and choose the correct one to measure the following items:



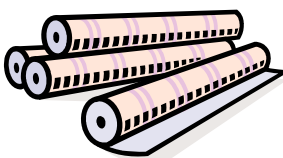
Length.....
Width.....



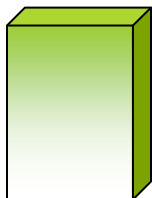
Length.....
Width.....
Height.....



Height.....



Width.....



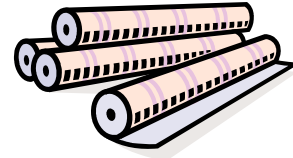
Height.....
Width.....
Depth.....

Remember:

- Estimate first, and then measure accurately.

Plan and prepare for the project

Estimate, measure and compare length using common standard and non standard measures (metres and centimetres) 1-1,2,3,4,5,6,



Is the box of paste longer than the pasting table?

Is the pencil longer than the box of adhesive?

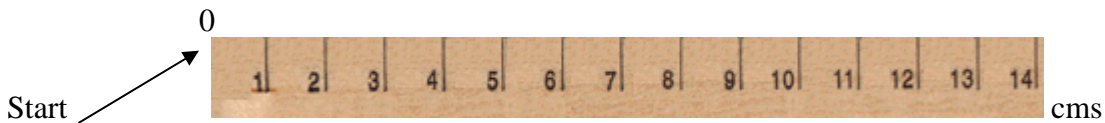
Is the wallpaper wider than the pasting table?

Is the pasting table wider than the box of adhesive?

Reading and recording measurements

A ruler is marked out at intervals of 1 centimetre (1cm)

Start reading measurements from 0 cm.



1. Estimate the length of each stick used for stirring adhesive.

2. Now measure accurately.

3. How close was your estimation?



EstimateActual



EstimateActual



EstimateActual



EstimateActual

Remember:
Some useful words for estimation are -

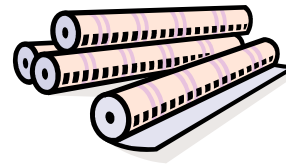
- Nearly
- About
- Almost
- Just under/over
- Approximately

Remember:

- It takes time and regular practice to be good at estimating.

Plan and prepare for the project

Estimate, measure and compare length using common standard and non standard measures (metres and centimetres) 1-1,2,3,4,5,6,



When there is wallpaper is too long you will need to cut some off.

Work in pairs.

Accurately measure and draw some lines.

Take it in turns to estimate the length.

Write their estimation first and then your accurate measurement



Partner's estimate Actual measurement.....

Partner's estimate Actual measurement.....

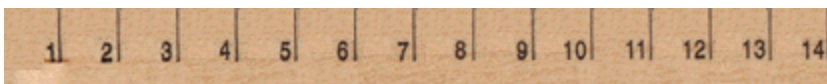
Partner's estimate Actual measurement.....

Partner's estimate Actual measurement.....

How close was your partner?.....

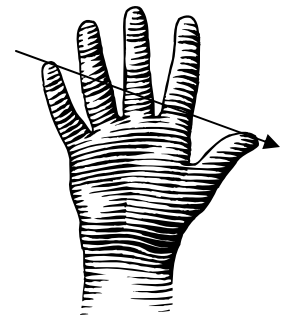
How close were you to your partner's measurement?.....

Why do we need to measure using cm and m?.....



Your hand span

Work with another person. Make an estimate first.
 Take it in turns to help each other to take measurements.
 You will need to use different size measuring tools.



	Estimate	Measurement	Partner's measurement
My pace			
My hand span			
My thumb width			
My height			

Compare your results. Discuss how it can affect your estimates.

- Is your pace more or less than a metre?
- Is your pace more or less than the width of wallpaper?
- Is your hand span wider than a sponge?
- Is your hand span longer than your pencil?.....

Work with another person and measure different parts in a room.
 Use centimetres and metre to record your results.

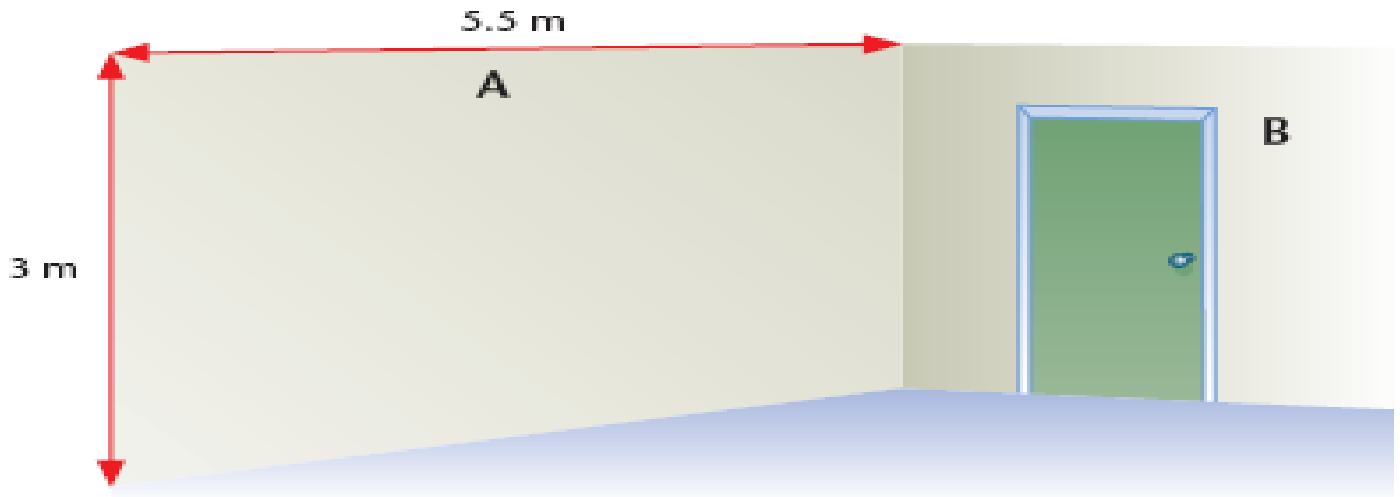
Estimate by using paces or hand spans

Complete the table. Find other things to measure and put them in the table

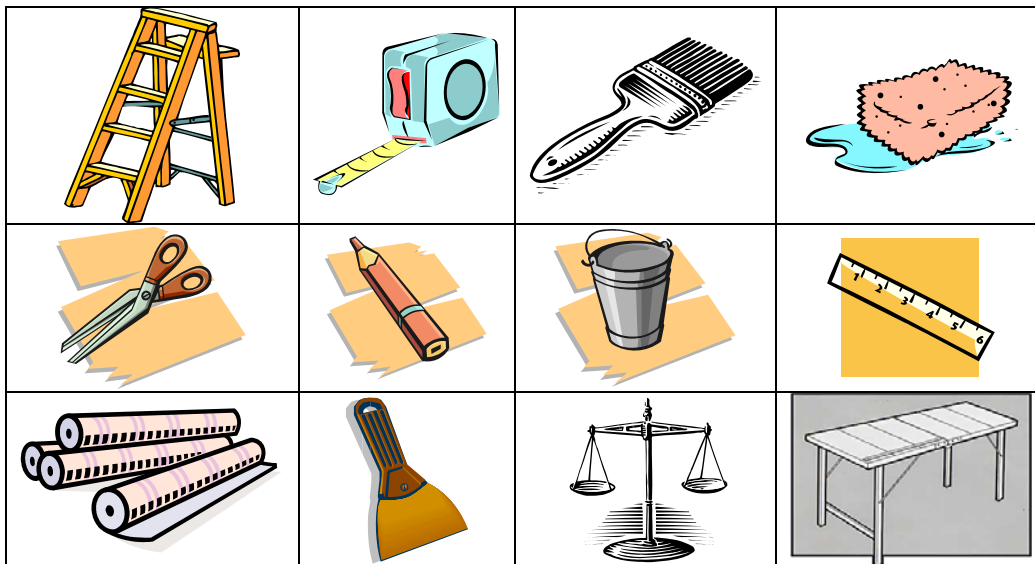
Part of room	Estimate	Measurement
Width of a window		
Height of a door		
Length of a wall		
Height of a wall to floor		
Width of a radiator		

Plan and prepare for the project

Understand and use everyday positional vocabulary 6-1,2



- Draw the pasting table in the middle of the wall
- Draw the ladder on the left of the table
- Draw the bucket between the table and the door
- Draw the brush inside the bucket
- Put the wallpaper on the table with the scissors near to it.



Now show your tutor where you will put tools and materials before you start the wallpapering project.

Plan and prepare for the project

Estimate, measure and compare weight using common standard units (kilogram) 2-1,2,3,4,5,6,7



Remember:

- A kilogram is a metric measure of weight.
- Kilogram can be written as - kilo or kg
- 1 Kilogram = 1000 grams

Ask your tutor for some scales and weigh some tools.

First estimate the weight by using your hands.

Then put them on the scales to measure accurately.

Read the scales to the nearest kilo, $\frac{1}{2}$ kilo (or 10 grams)

Mark the weight of the tools on the scales (to add to paper).

<p>Estimate</p> <p>Actual</p>	<p>Estimate</p> <p>Actual</p>	<p>Estimate</p> <p>Actual</p>
<p>Estimate</p> <p>Actual</p>	<p>Estimate</p> <p>Actual</p>	<p>Estimate</p> <p>Actual</p>

How much weight can you fit into a tool box?

First estimate how much weight it can hold.....

Weigh the empty tool box. How much does it weigh?

Now fill the box with your tools. How much does it weigh?

Was it more than or less than you estimated?

Plan and prepare for the project

Estimate, measure and compare capacity using common standard measures and non-standard measures (cupful, litres) instruments. 3-1,2,3



Ask your tutor for a measuring jug, a drinking mug and some different size containers.

Remember:

- A litre is a metric unit of capacity
- It measures how much something holds, usually of liquids such as water
- Litre is written as l. For example:
Two litres is written as 2l.



How much water do different containers hold?

Estimate the amount to the nearest $\frac{1}{2}$ or whole litre.
Put your answers in the table below.

Container	Estimate	Actual capacity

Think about how many drinks you have in a day.

How many cupfuls do you drink in a day?

Now find a suitable container that will hold all the drinks for one day.

How many mugs did you need?

About how many litres is that?

You need a bucket and a jug.

Remember:

- Estimate first, and then measure accurately.

How many litres of water do you need to fill the bucket?



Estimatejugs = 1 bucket

Actualjugs = 1 bucket



Plan and prepare for the project

Estimate, measure and compare capacity using common standard measures and non-standard measures (cupful, litres) instruments. 3-1,2,3

Mixing and coverage guide for Standard Paste Wallpaper Adhesive.

This table shows how much water to use for each sachet of paste.

Type of paper	Quantity of cold water to use per sachet	Approx coverage per sachet
Normal Wallpapers (including woodchip and lining paper)	6.5 litres	10 rolls
Vinyls and washable papers	5.5 litres	8 rolls
Embossed paper	4.5 litres	6 rolls

Use a bucket and water to find out how much paste can be made in your bucket.

Measure 6.5 litres of cold water into your bucket.

Is your bucket more than or less than half full?

Can you double the amount of water in your bucket?

Measure 4.5 litres of cold water into your bucket.

Is your bucket more than or less than half full?

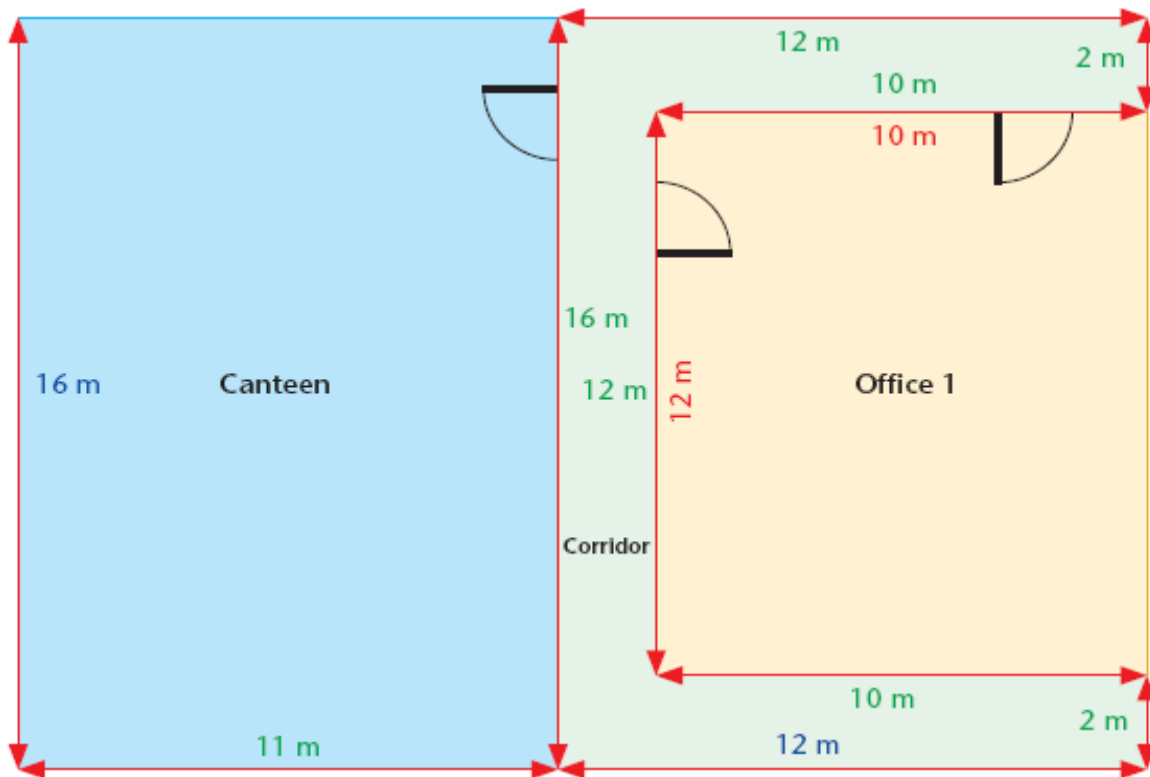
Can you double the amount of water in your bucket?

Mark on the jug $\frac{1}{2}$ litre, 2 l, and 5 l. You need 1 litre of paint for the ceiling. How many $\frac{1}{2}$ litre tins is that? Sort out cans of paint into capacity. Fill in table. Which 3 objects would you measure in litres/kilos/metres/centimetres (to add to paper).

weight	Capacity	Length

3. Apply plain wallpaper

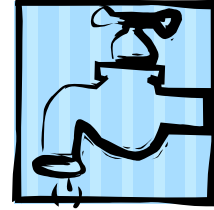
Understand and apply everyday positional vocabulary 6-1,2



1. You need to decorate this area.
2. What is between the two rooms?
3. Where is the canteen?
4. Which doors are near to each other?
5. Draw a window opposite the canteen door.
6. Draw a pasting table inside the office.
7. Show your tutor where you plan to start wallpapering from.

4. Maintain tools and working area

Understand and apply everyday positional vocabulary 6-1,2



You will need to look after your tools and tidy up after decorating.

Follow the instructions below. Tick the box when you have done them.

Tell your tutor what else you will need to do. Add the task to the table.

Task	Completed?	Tutor to sign
Rinse your brushes under the tap.		
Fold your pasting table and put it next to the door		
Wash your bucket and put your clean brushes in it		
Throw away any bits of wallpaper and rubbish in the bin near the sink.		
Put your tool box next to the pasting table.		
Put any extra wallpaper near to the tool box.		
Put your step ladders next to the pasting table away from the door.		

You need to leave a message to say what time you will be back in the morning. Where would the best place for you to leave the message for others to find?

Tick the correct answers.

In the bathroom

behind the mirror

on the window sill

Extension activity

Roll a rectangle of different size paper into tubes and use paper clips or tape to hold them together to make an open cylinder. The rectangle makes one curved surface of a cylinder. If the cylinder had a top and bottom, how many surfaces would it have altogether?

Resources for measuring:

- Rulers - 30 cm, tape measure, metre ruler
- Scales - bathroom scales, kitchen scales,
- measuring jug, mug, bucket, bottles, containers

Vocabulary:

- measure, long, tall, height, length, width, weigh, weight, heavy, light, capacity,
- between, to the right, to the left, inside, near to
- more than, less than, twice as much nearly, about
- longer, shorter, heavier, lighter, narrower, wider, bigger, smaller
- rectangle, square, cube, circle, triangle, cylinder,

Activities:

- labelling pictures of equipment, containers
- gap filling exercise
- fill in a table
- discuss results with others
- Follow instructions

Metric Measures - The Units

Length

1 centimetres also written as 1 cm

1 metre also written as 1 m

Capacity (liquid)

1 litre also written as 1 l

Weight

1 kilogram also written as 1 kg or 1 kilo

REMEMBER:

There are a 100 centimetre in 1 metre.

Also written as 100 cm in 1 m.