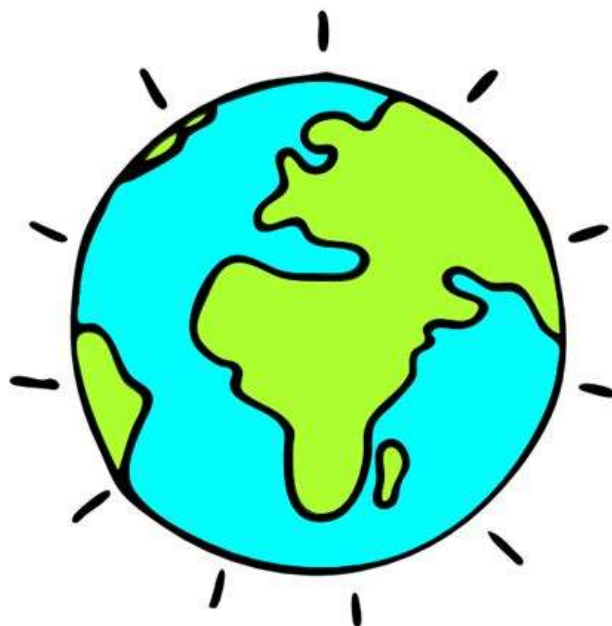


Geography

Knowledge

Organiser





Term 1	Topics	Checklist
Map Skills	Three types of Geography	
	Mental Maps	
	Symbols	
	Direction	
	Measuring distance	
	Grid References	
	Plans	
	Scale	
	Test yourself	

Term 1	Topics	Checklist
Rocks	Structure of the Earth	
	Rock Types	
	Weathering and Erosion	
	Uses of Rocks	
	Test Yourself	

Term 2	Topics	Checklist
The World of Work	Types of Jobs	
	Coca Cola	
	Project	

Term 2	Topics	Checklist
Rainforest	Layers of the Rainforest	
	Rainforest Dominoes	
	Vocabulary tree	
	What to wear	
	Destruction of the Rainforest	

Map Skills



What is Geography?

There are three types of geography. Use the words in the word box to complete the sentences. Then colour the box beside physical geography red, human geography blue and environmental geography green.

Physical	Human	Environmental
----------	-------	---------------

- _____ Geography is about what the earth is like.
- _____ Geography is about where and how we live.
- _____ Geography is about how we affect our surroundings

The boxes below all match a certain type of geography use the key above to colour each box to match the correct type of geography.

Natural disasters like floods, earthquakes and volcanoes.	How countries trade goods like food with each other.	Natural features like rives, rocks, coasts and mountains.
How and why the human population is growing.	The need for all of us to recycle.	How clouds are formed.
Why people shop in different places	Acid rain and greenhouse gases.	How we can protect wildlife.



Type of geography:

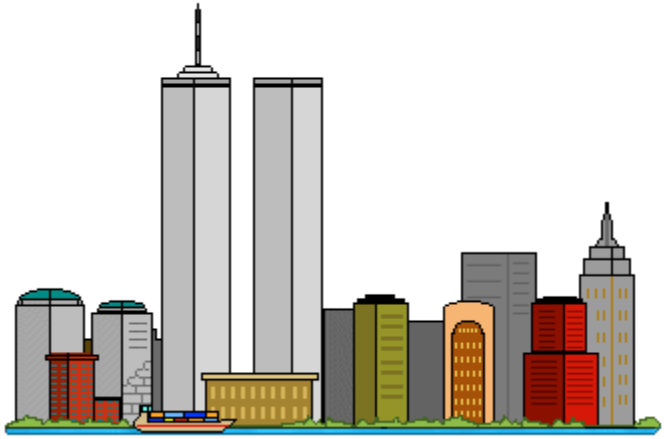
State three things that fit in with the type of geography in the picture

- 1. _____
- 2. _____
- 3. _____

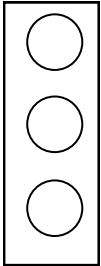
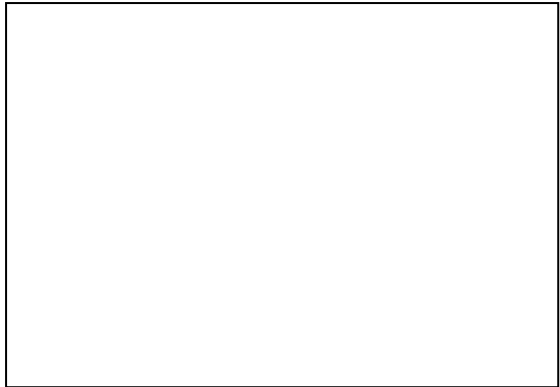
Type of geography: _____

State three things that fit the type of geography on the picture

- 1. _____
- 2. _____
- 3. _____



In the box draw a picture that you think describes **environmental geography**.



Odd one out – Types of Geography

1. **physical** **human** **river** **environmental**

I think _____ is the odd one out because

2. **man made** **unnatural** **human** **physical**

I think _____ is the odd one out because

3. **river** **shopping** **volcano** **weather**

I think _____

4. **mountain** **recycling** **pollution** **waste**

I think _____

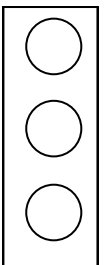
5. **cities** **buildings** **crime** **hurricane**

I think

6. In the spaces below make up two of your own lists and get your partner to guess the odd one out

a) _____

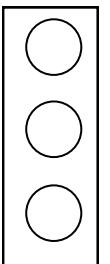
b) _____



Mental Maps




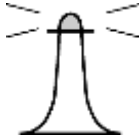

A mental map is a map you carry around in your head that helps you make your way to and from places you want to go.

In the box below draw your mental map of Hazelwood Integrated College. Don't forget to add labels and colour

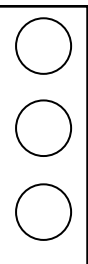


Symbols

Using colour match the symbols to their meaning.

Picnic site		Sch
Coniferous wood (fir trees)	PO	Path
Railway track	Lighthouse (in use)	Telephone
-----		Post office
—————		
School		Parking

Why do we use symbols on a map?




Navigation Nightmare




Decode the symbols and then write out the letter on the next page.

Hi Chris,

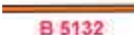



Here are the directions I promised. Turn right when you reach the **PH** and




carry on until you pass a .

Go over the  and through a  , you will see signs for a

 and  on your left and a little further on there is a clearing with a  and **PC**.

As you come out of the   you will see a . Follow the

 as it winds down onto the . Go over the  and turn right at the T junction. You will see a  on your left and a . Pull into the **P** and walk over to the **i**. Follow the that is

signposted to the  but be careful, one section of the runs along the side of a . I will be arriving at the  at about 3pm.

See you soon,

Sam.

Measuring Distance – read the information below to help you remember how to measure distance on a map

How long is a piece of string?

It's usually not possible to travel in a straight line between two points on a map. If you're following a road or footpath, it can change direction many times to avoid things like woods and rivers.

However, there are still simple ways of measuring the actual distance you will need to travel between two points. One of them is to use a piece of string.

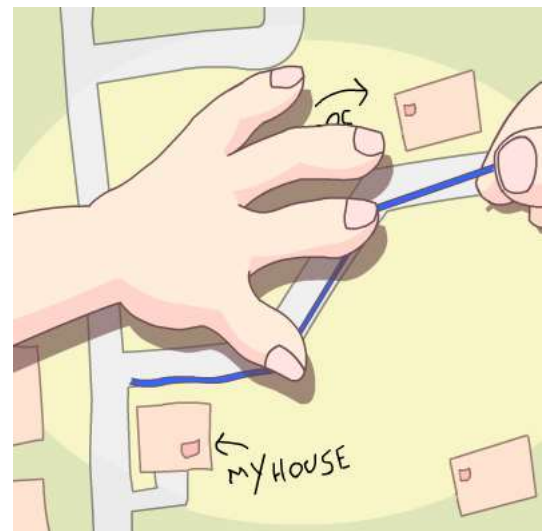


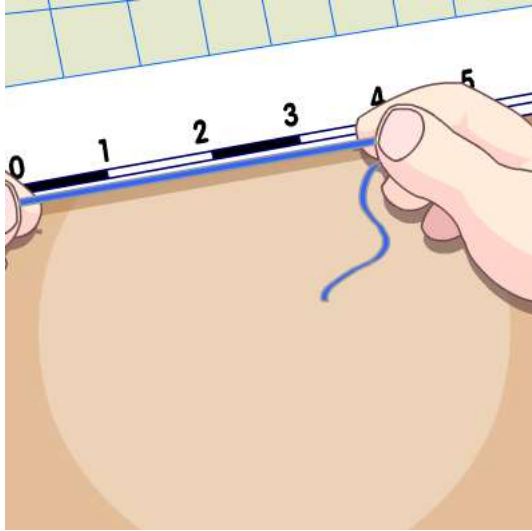
Step 1

Take a length of string – it's best to take one longer than you think you'll need – and place one end on your starting point.

Step 2

Now carefully lay the string along the road or path you know you're going to use, following the curves as closely as you can. When you reach your finishing point, mark it on your string with a pen.





Step 3

Now that you have your distance from the map, you can straighten out your string and place it against the scale bar to find out how far you will actually be travelling.

On the paper's edge

Another method of measuring distance is to take a sheet of paper and place the corner of a straight edge on your starting point. Now pivot the paper until the edge follows the route that you want to take.

Step 1

Every time the route disappears or moves away from the straight edge of your paper, make a small mark on the edge and pivot the paper so the edge is back on course.



Step 2

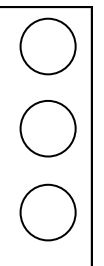
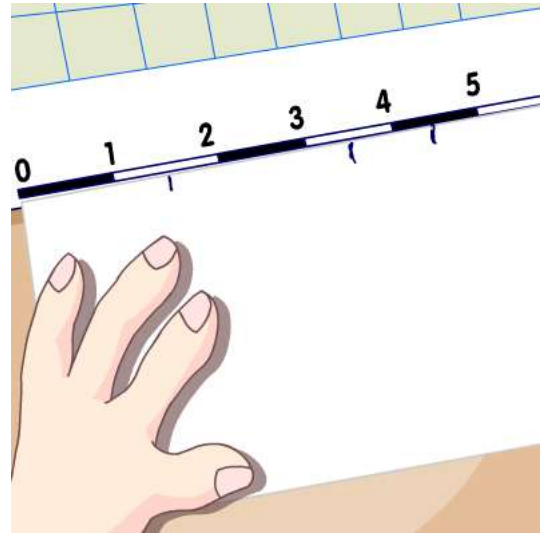
Repeat this process until you reach your destination.



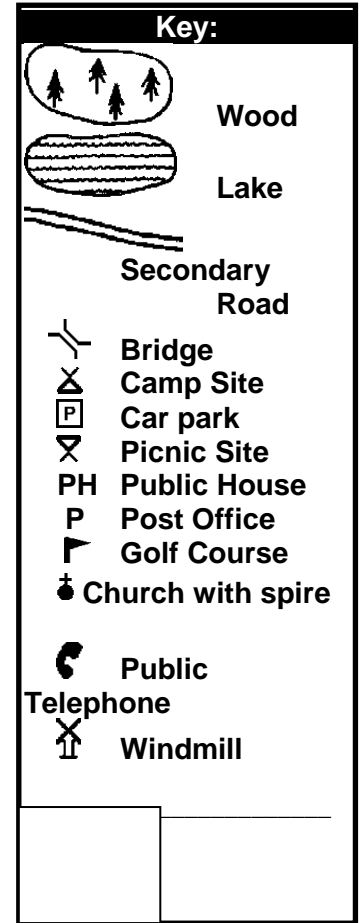
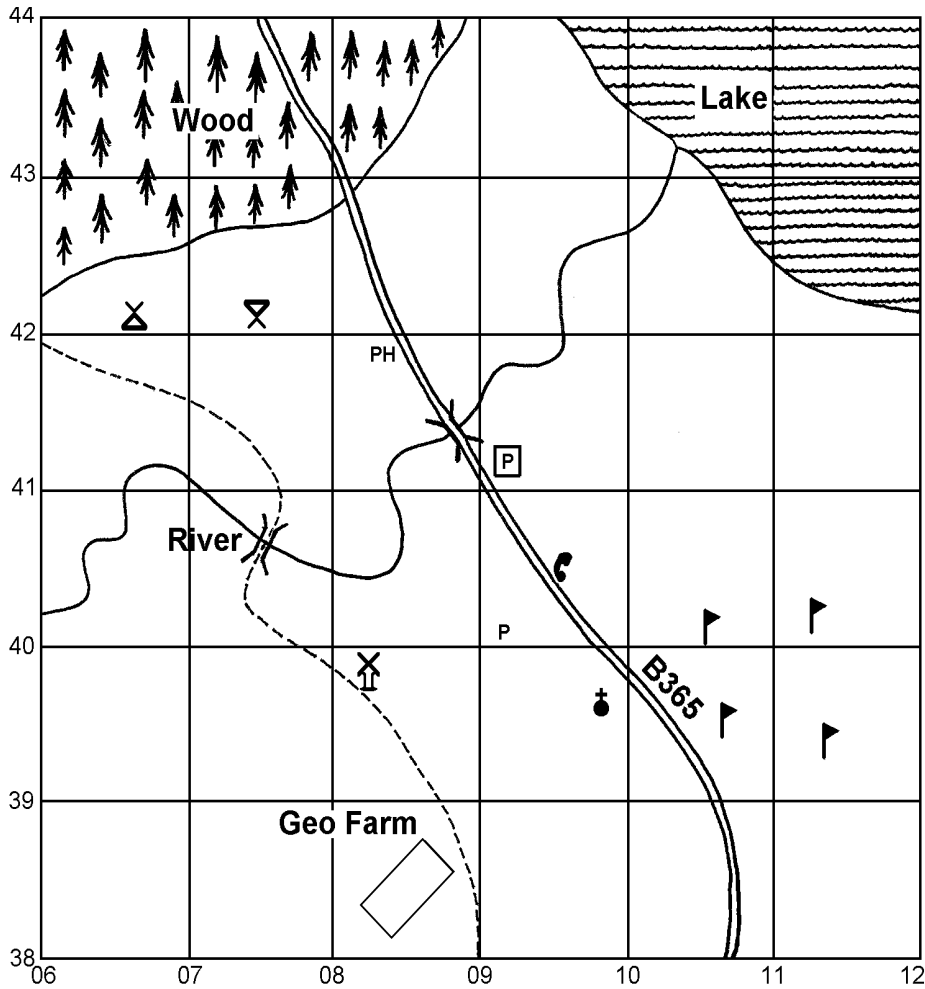
Step 3

You should be left with a series of marks along the edge of your paper. You can now place the sheet against the scale bar on your map.

The last mark you made will tell you the real distance you need to travel.



Grid References



1. Give a 4-figure grid reference to locate the lake

_____.

2. Give a 4-figure grid reference to locate part of the wood

_____.

3. Give a 4-figure grid reference for a bridge

_____.

4. Give a 4-figure grid reference containing part of the golf course

_____.

5. Give a 4-figure grid reference for the Geo farm

_____.

6. Give a 4-figure grid reference for the post office

_____.

7. The _____ is in square 0839.

8. The _____ is in square 0841.

9. The _____ is in square 0742.

10. The _____ is in square 0941.

6 figure grid references are a much more accurate way to locate places on a map (there is a help sheet on the next page to remind you how to do 6 figure references). Give the 6 figure grid references for the following.

11. a) Camp site: _____

b) Parking : _____

c) Windmill: _____

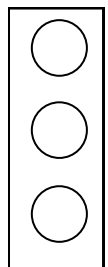
Now use the 6-figure grid references to fill in the blanks.

12. a) The _____ is located at 074421.

b) The _____ is located at 083419.

c) The _____ is located at 091401.

15. A theme park has just been built close to the golf course in **grid square 1041**. Think of symbol for the theme park and add it to the key with a label. Now add the theme park to the map.

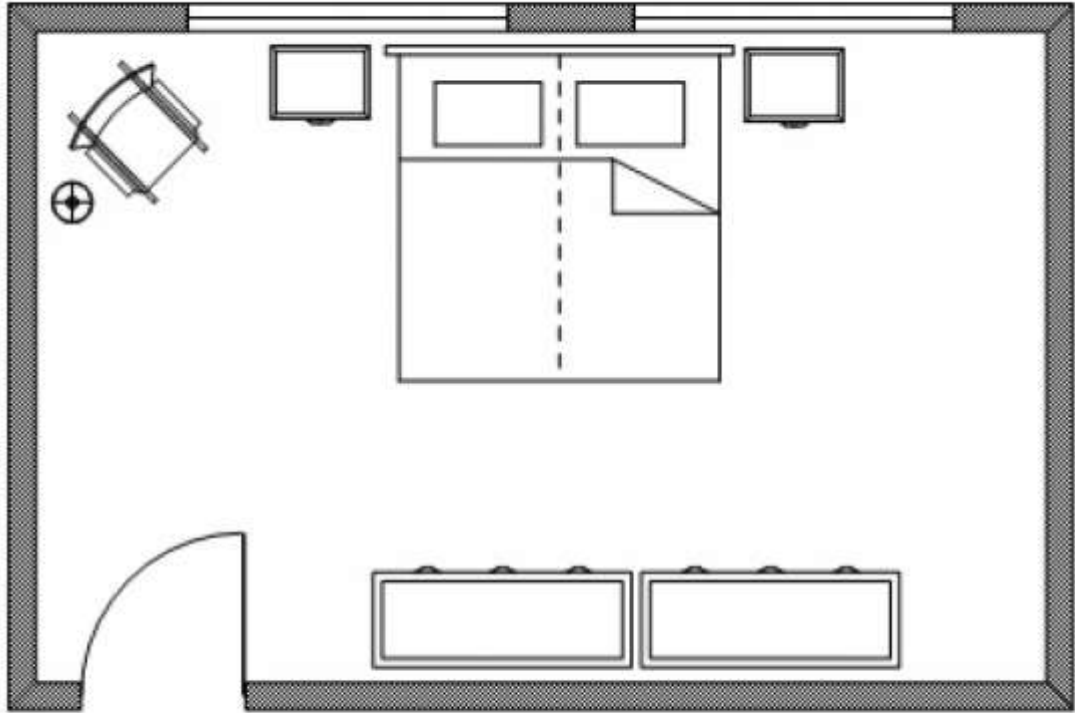


Plans

A plan in Geography is a 'birds eye view' of an object, room or area.

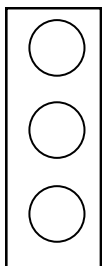
Look at the plan below which shows a bedroom.

Label what you see in the bedroom on the plan.



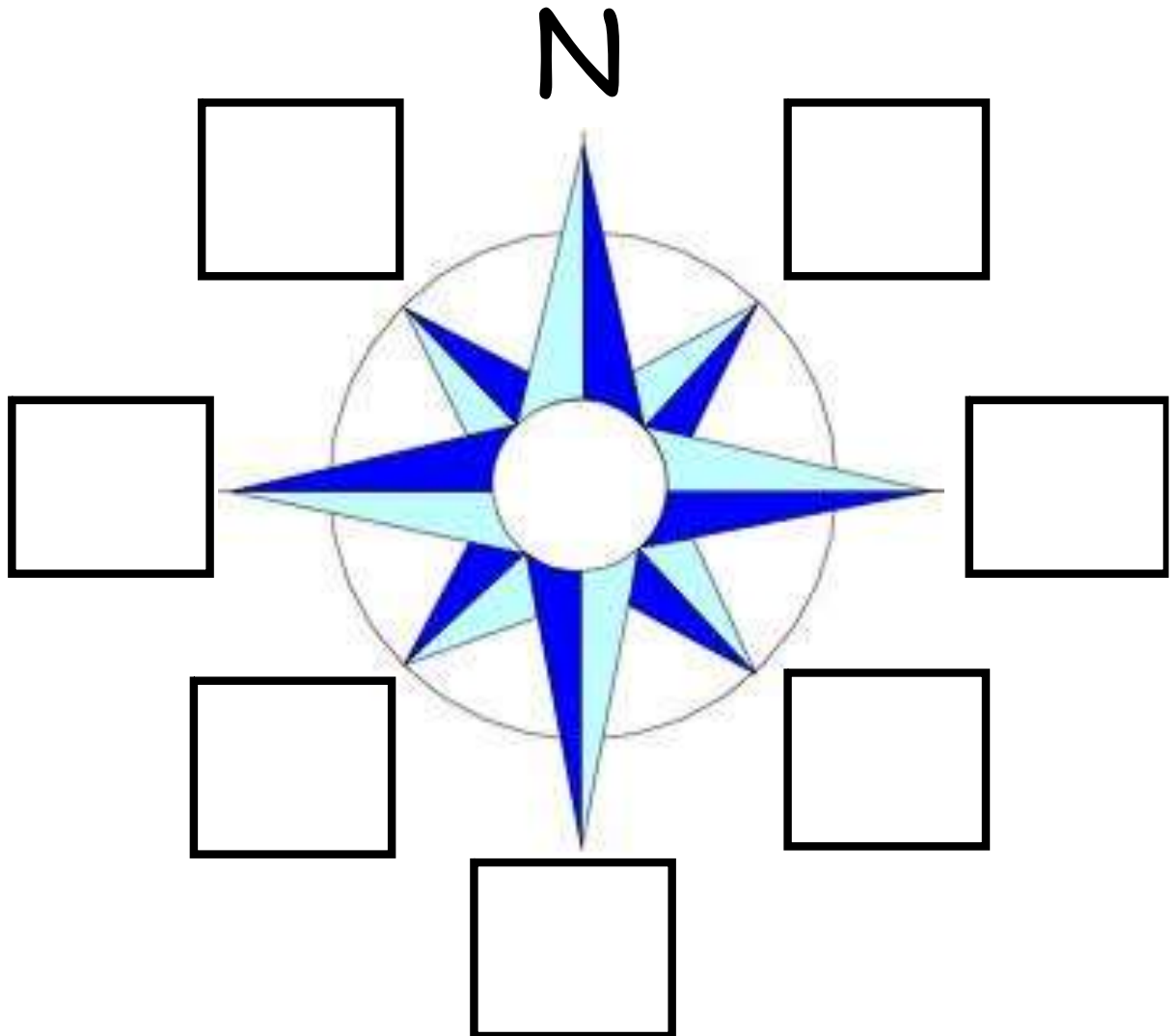
Bedroom

1. Look at the picture of the chair and draw a plan for it.

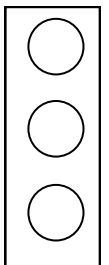


Compass Points

Complete the compass

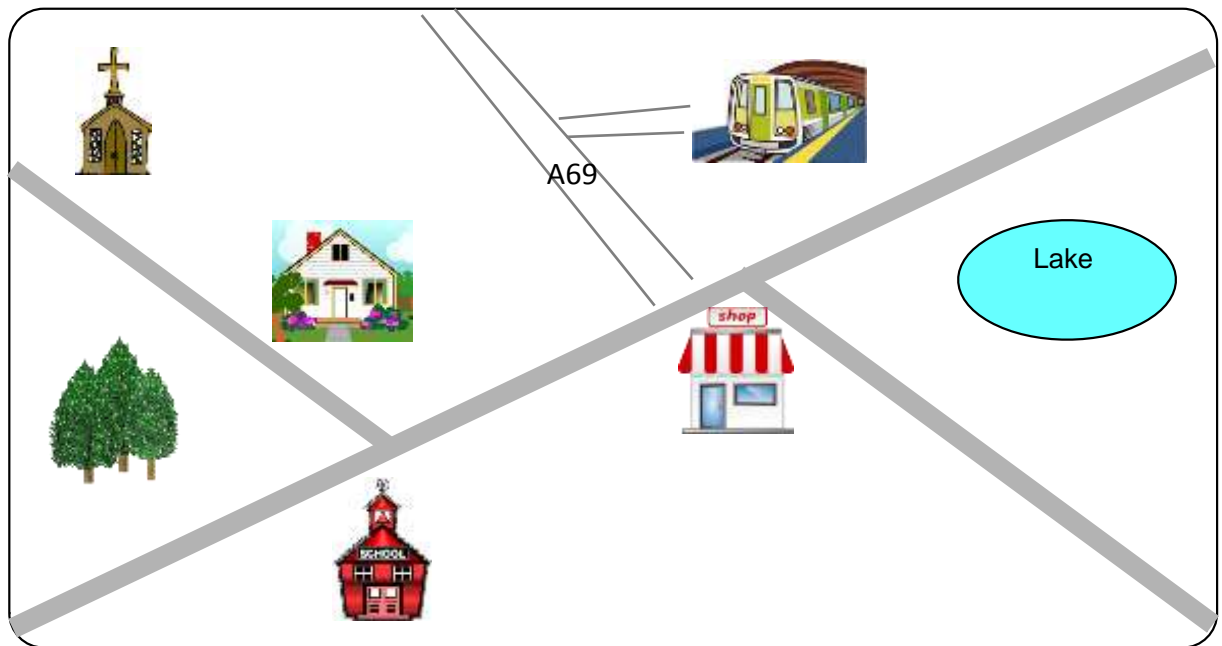


What is the rhyme that we use to remember the points of the compass?



Compass points

Using the map below answer the questions that follow;



- 1) Fill in the gaps: The school is s_____ of the house.
The train station is n_____ of the shop.
The l_____ is east of the house.
The f_____ is west of the shop.
The church is n_____ w_____ of the house.

2a) Underline where the following are compared to the shop.

The lake is north east/ south east of the shop.

The forest is west/east of the shop

The church is north east/ north west of the shop.

The train station is north/ south of the shop.

The school is north east/ south west of the shop.

2b) Underline where the following are compared to the church.

The forest is south/ north of the church.

The train station is east/ west of the church.

The house is north east/ south east of the church.

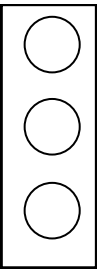
The shop is south east/ north east of the church.

The lake is south east/ south west of the church.

3. Make up two questions of your own one like question 1) and the other like question 2)

a) _____

b) - _____



Scale

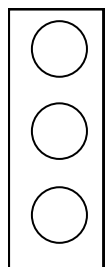
A map **scale** is the size of an object compared to the size of the object's smaller representative on a map. The scale lets the person using the map measure a distance on the map and know what is the distance on the ground. To use scale you need to practice your Math's.

1 cm equals 4 cm

1. What does 3 cm equal? _____
2. What does 2cm equal? _____
3. What does 4 cm equal? _____
4. What does 5 cm equal? _____
5. What does 10 cm equal? _____
6. What does 1.5 cm equal? _____
7. What does 3.5 cm equal? _____
8. What does 11 cm equal? _____
9. What does 6 cm equal? _____
10. What does 0.25 cm equal? _____

1 cm equals 8 cm

11. What does 3 cm equal? _____
12. What does 2cm equal? _____
13. What does 4 cm equal? _____
14. What does 5 cm equal? _____
15. What does 10 cm equal? _____
16. What does 1.5 cm equal? _____
17. What does 3.5 cm equal? _____
18. What does 11 cm equal? _____
19. What does 6 cm equal? _____
20. What does 0.25 cm equal? _____



Test Yourself- Map Skills



1. What are the three types of Geography?

A) _____

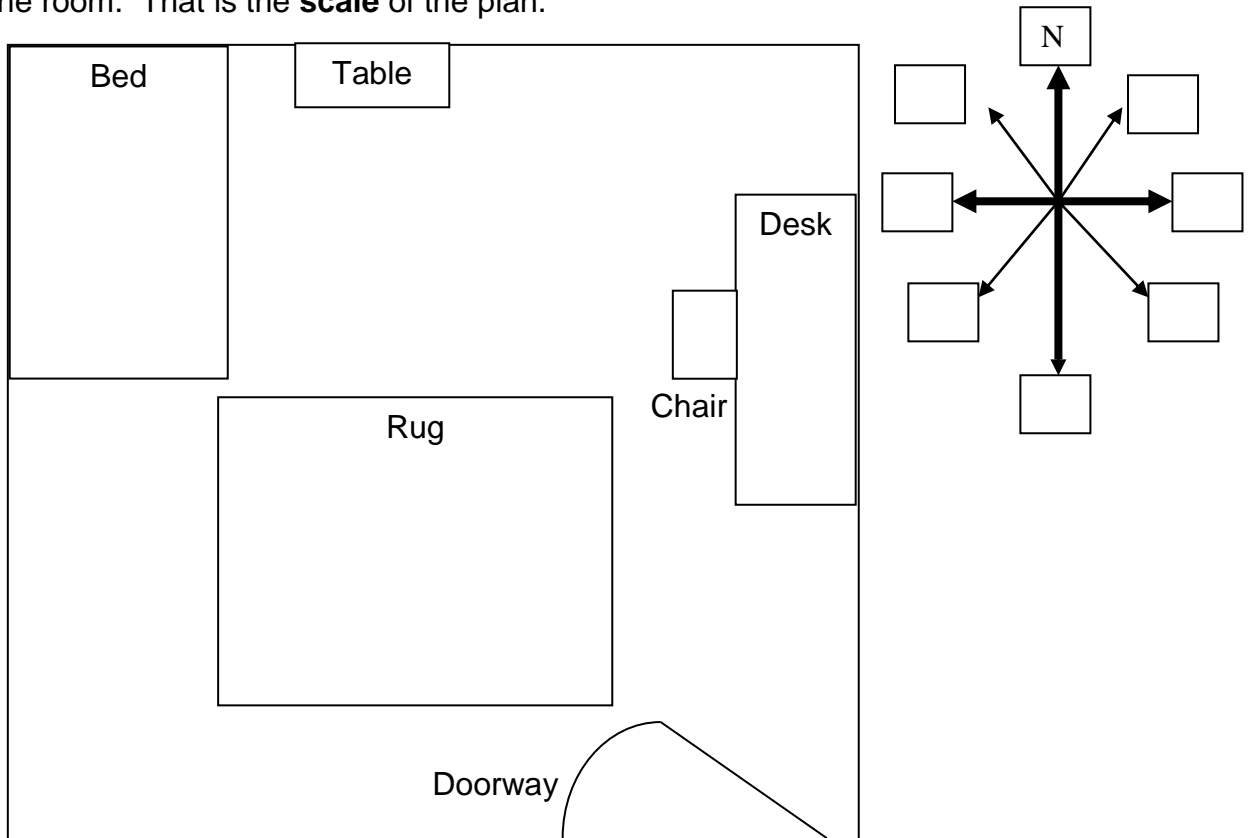
B) _____

C) _____

2. Complete the table below using your knowledge on OS symbols (6marks)

Name of Symbol	Symbol
Church with a spire	
	
	
Campsite	

The diagram below shows the plan of a bedroom. 1cm on the plan represents 20cm in the room. That is the **scale** of the plan.



a) Complete the compass (7marks)

b) Complete the sentences using the compass directions and the plan of the bedroom.
(5marks)

The table is _____ of the rug.

The chair is _____ of the desk.

The _____ is south east of the bed.

The bed is _____ of the doorway.

c) 1cm on the plan represents 20cm in the room. That is the **scale** of the plan.
Fill in the gaps using the plan of the bedroom. (6marks)

On the plan the bed is _____ cm wide. So in real life the window is
_____ cm wide.

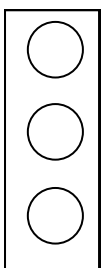
On the plan the rug is _____ cm long. So in real life the rug is _____
long.

On the plan the desk is _____ cm wide. So in real life the desk is _____
long.

d) How long is the table in real life?

_____ (2marks)

e) The window in the bedroom has been left off the plan. The window is **west** of the
desk and is 4cm long and 1 cm wide. Using a pencil add the window onto your plan.
(3marks)



Rocks

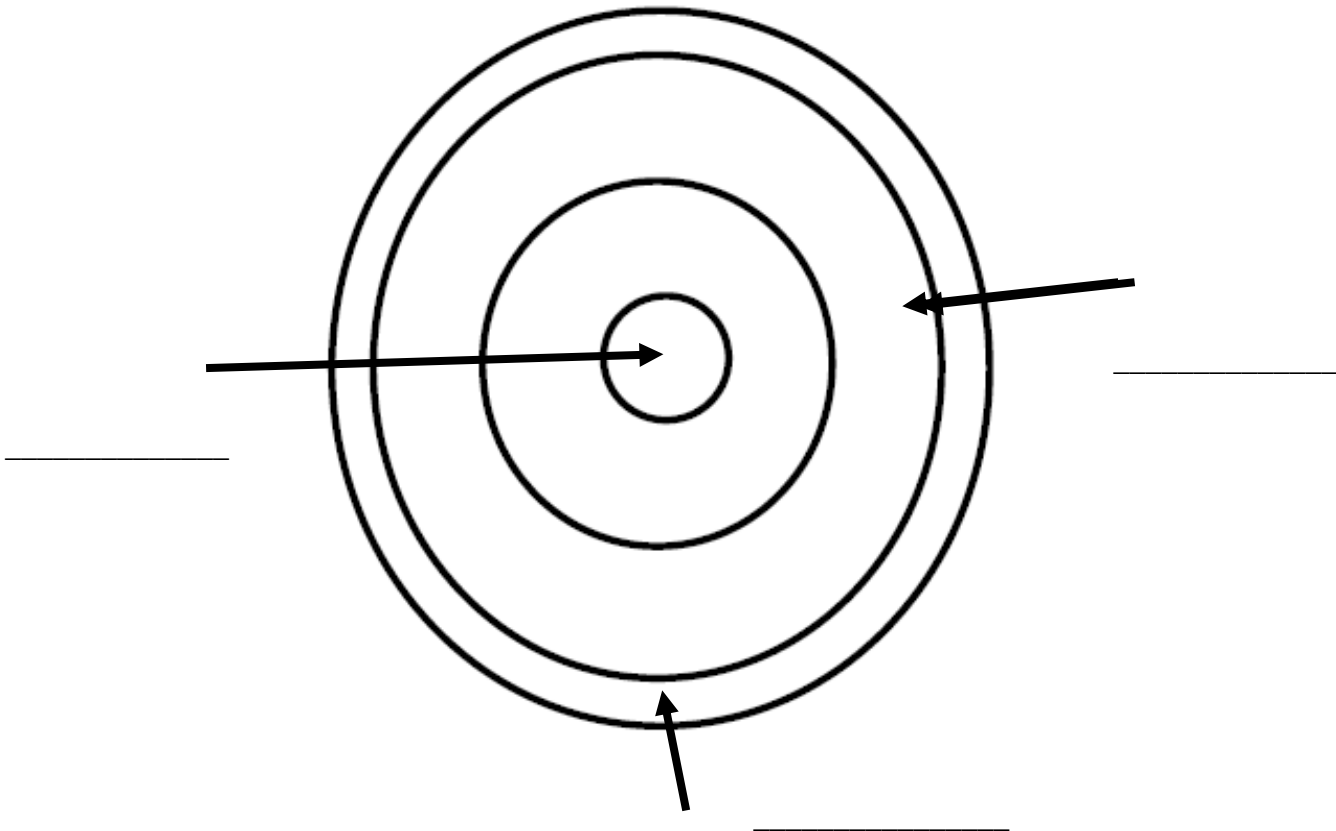


Structure of the Earth

1. Label the diagram below. (3marks)

Use the word box to help you.

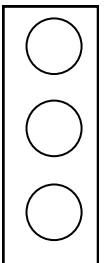
mantle	continental	oceanic	core
crust	upper crust	centre	



b) Colour the hottest part red. (2marks)

c) Colour the layer we live on green. (2marks)

d) Colour the layer with molten and hard rock orange. (2marks)



ROCK TYPES

- There are three different type of rocks, *Sedimentary, Igneous and Metamorphic*.
- Read the statements below and use your knowledge of rocks to decide which are true and which are false. Put a **tick** beside the **true** statements and an **x** beside the **false** statements.
- If you think the statement is false write the correct statement below it

1. Slow cooling of igneous rocks produces small crystals.

2. Igneous rocks form mainly beneath the sea.

3. Metamorphic rocks have been changed by great heat or pressure.

4. Rocks formed by the cooling of magma are igneous.

5. Sedimentary rocks are bits of dead plants, animals and other rocks.

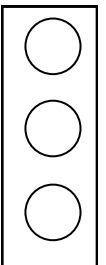
6. Igneous rocks have fossils.

7. Sedimentary rocks are very hard.

8. Metamorphic rocks are the most common in the British Isles.

9. Limestone is a sedimentary rock.

10. Marble was once limestone so is a sedimentary rock.





ODD ROCK OUT

By now you should really know your stuff, and be budding Geologists! Look at the sequences of words below and work out which word is the odd one out in each sequence and why?

1.

IGNEOUS GRANITE FOSSIL

Odd one out _____

REASON _____

2.

SANDSTONE SCHIST CLAY

Odd one out _____

REASON _____

3.

HEAT PRESSURE PLANTS

Odd one out _____

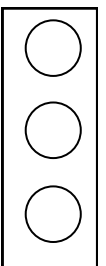
REASON _____

4.

LAYERS MARBLE LIMESTONE

Odd one out _____

REASON _____



Weathering and Erosion

1. Onion Skin Weathering

Draw a diagram to explain how onion skin weathering occurs and use these key words to label it

**Sun Heat Temperature rise
Temperature drop Outer layers Expand
Contract**

2. Freeze-thaw Weathering
Rocks can be broken by weathering when:

1. Water gets into cracks in rocks.
2. The water in the cracks turns to ice and expands.
3. The rocks split into smaller pieces.

What else must happen during this part of this weathering process?

Tick two boxes.

The temperature stays the same.

The temperature falls below freezing point.

The temperature stays above freezing point.

Expansion forces the cracks in the rock to close.

Expansion forces the cracks in the rock to open.

Expansion forces all of the water out of the cracks.

3. Acid Rain

Explain how acid rain occurs & how it weathers rocks and buildings.

4. Weathering, Erosion, Neither?

Decide if the following are Weathering, Erosion or Neither.

Eg.

1. The stones in an old wall have been pushed apart by weeds _____

2. An old granite gravestone is still smooth and shiny _____

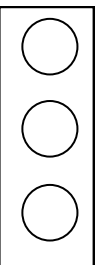
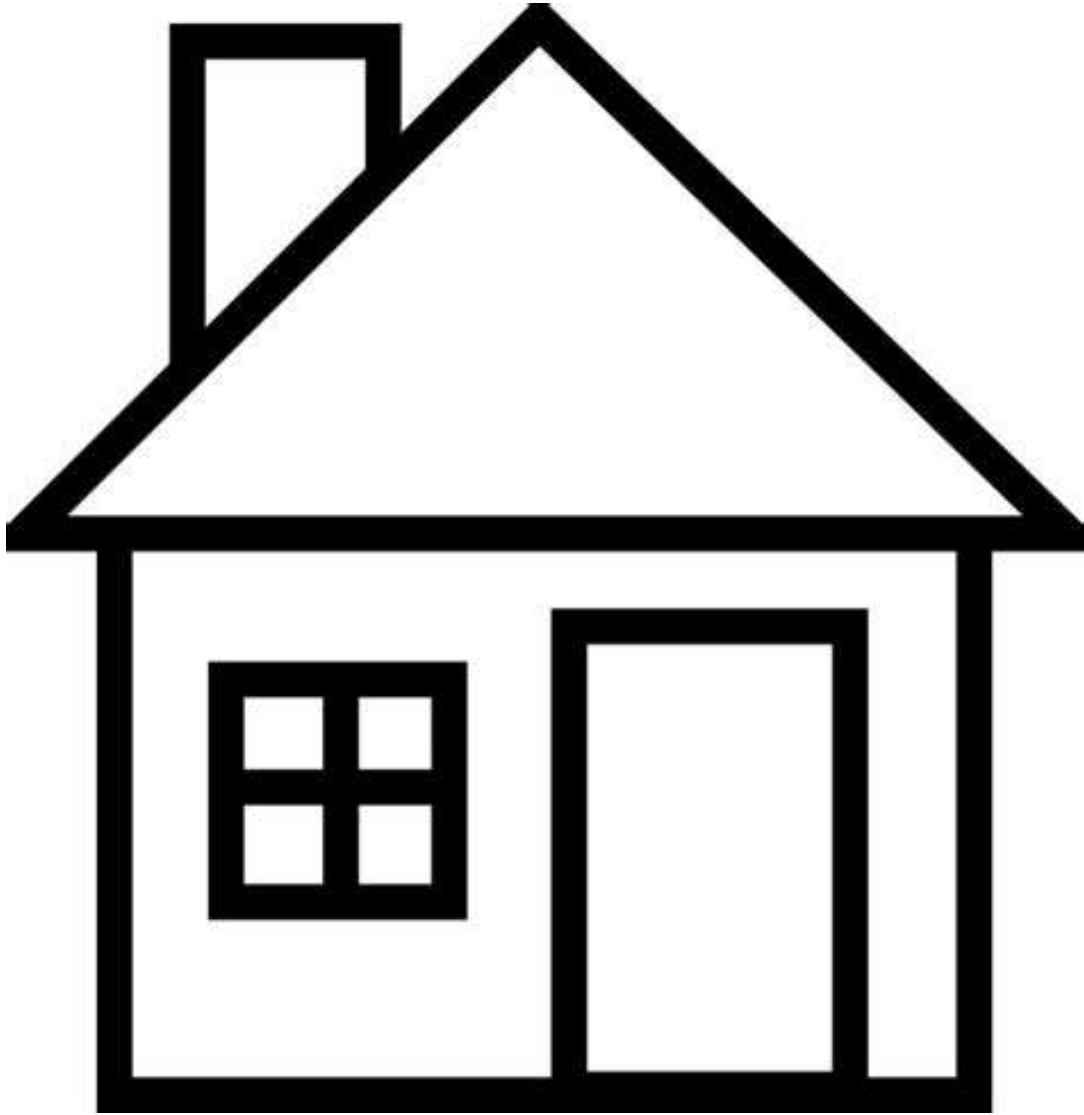
3. A clay flower pot in the garden has crumbled and broken into pieces during winter.

4. Some soil has been washed from a flower bed by rain

<input type="radio"/>
<input type="radio"/>
<input type="radio"/>

Uses of Rock

There are many ways we use rocks, label the picture of the house below with all the uses of rock in the and around the house.



Test Yourself- Rocks

1. What are the 3 types of rock? _____

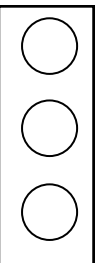
2. What type of rock are the following:
Sandstone, _____
limestone, _____
granite, _____
basalt, _____
slate _____
3. What are the two conditions needed for a metamorphic rock to form?
_____ and _____
4. Which metamorphic rock is formed from limestone? _____
5. Why wouldn't you find any fossils in igneous or metamorphic rocks?

6. You find a rock containing crystals. What type of rock would it most probably be? _____
7. What is molten rock that is inside the Earth called? _____
8. What is molten rock that is outside the Earth called? _____
9. Granite is an igneous rock and contains large crystals. Did it cool down slowly or quickly? _____
10. In the rock cycle what causes igneous rock to become sedimentary rock?

11. In the rock cycle again what causes the sedimentary rock to become metamorphic rock? _____
12. Gravestones are usually made out of marble or granite instead of limestone or sandstone. Why? _____

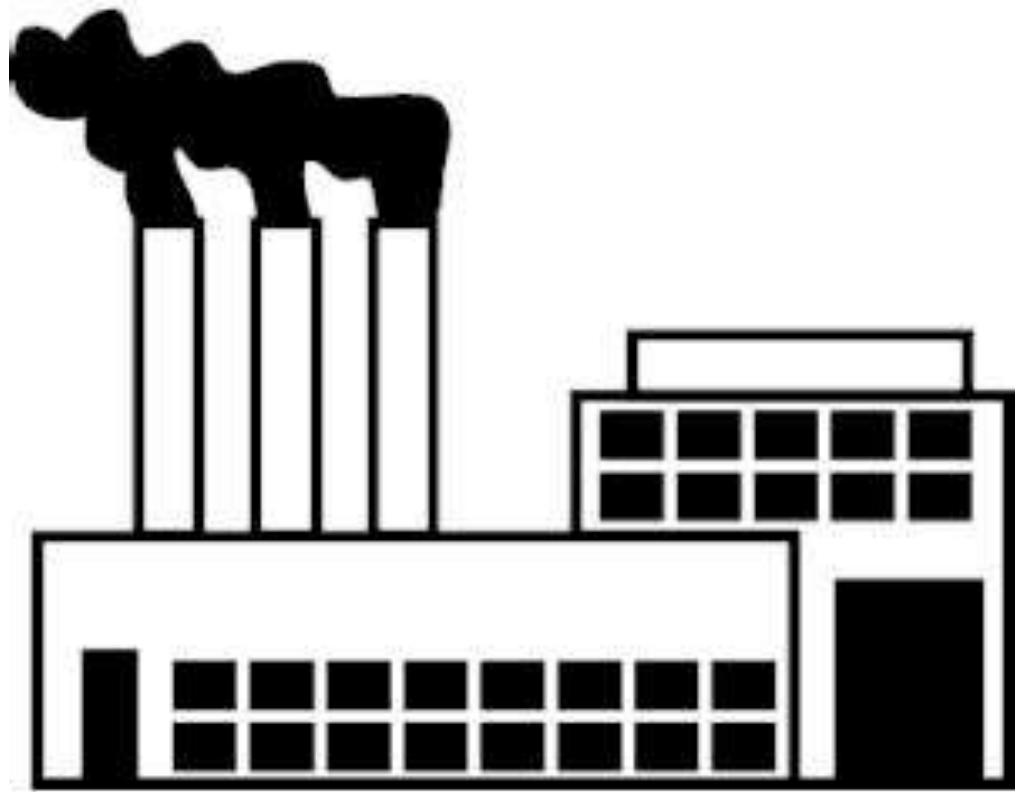
13. A piece of rock contains layers. What type of rock would it probably be?

14. What type of rock is found at the Giant's Causeway? _____
15. What is slate used for? _____
16. What happens at a quarry? _____



World of

Work



Types of Jobs

There are four different categories of employment match the category to the correct definition and then to the correct picture

Primary

Involves making/manufacturing products

Secondary

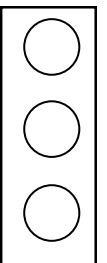
Providing a service for someone

Tertiary

Specialist IT and Research and Design

Quaternary

Involves removing raw materials from the ground or sea



Coca Cola

In the space below design a new drink for Coca Cola

Inputs – what will go into your drink?

Processes- how will your drink be made?

Outputs – what waste will be produced from your drink?

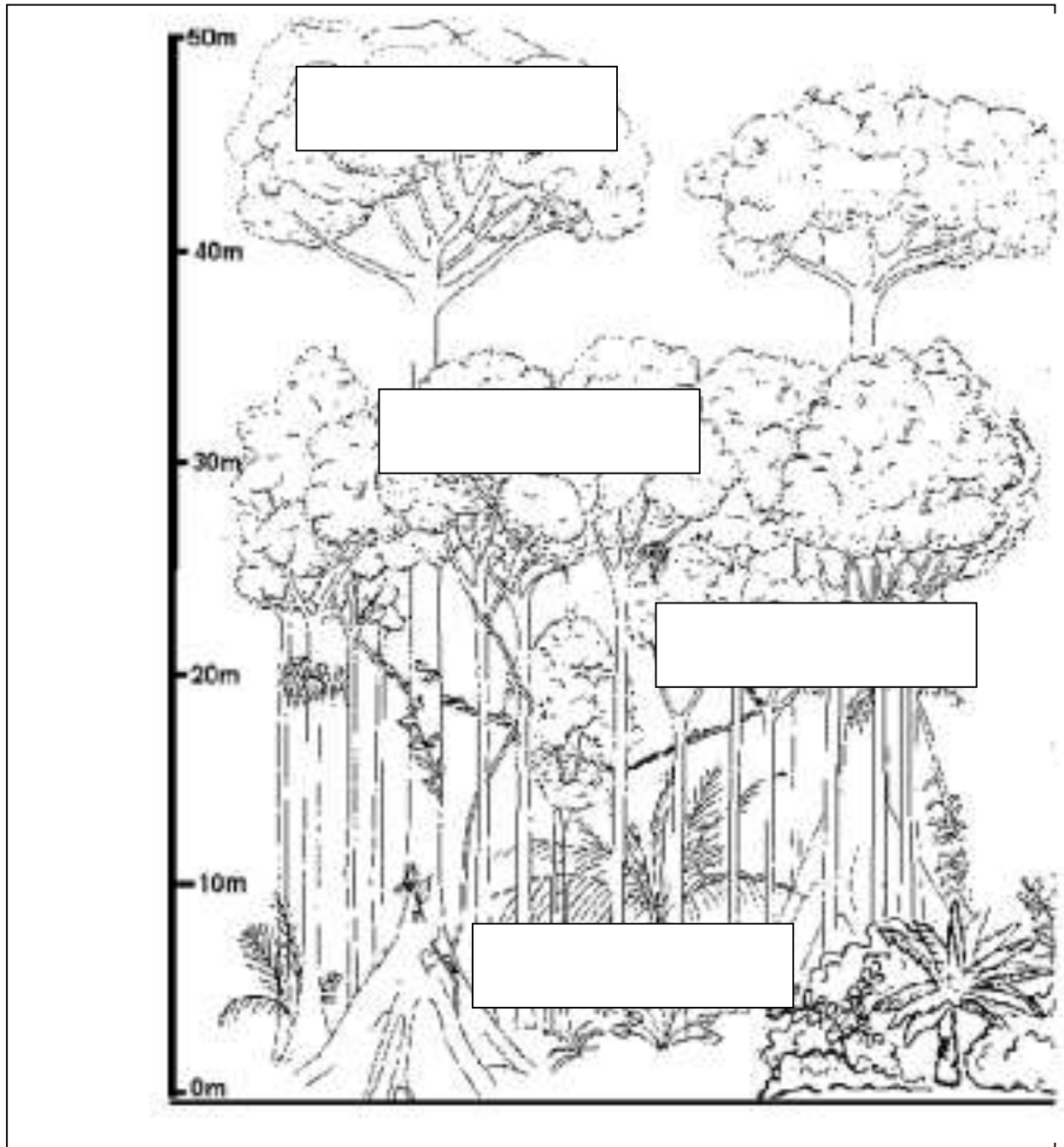


Rainforests



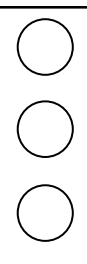
Layers of the rainforest

Label the diagram below that shows the layers of the rainforest.



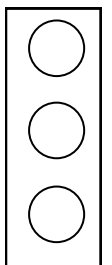
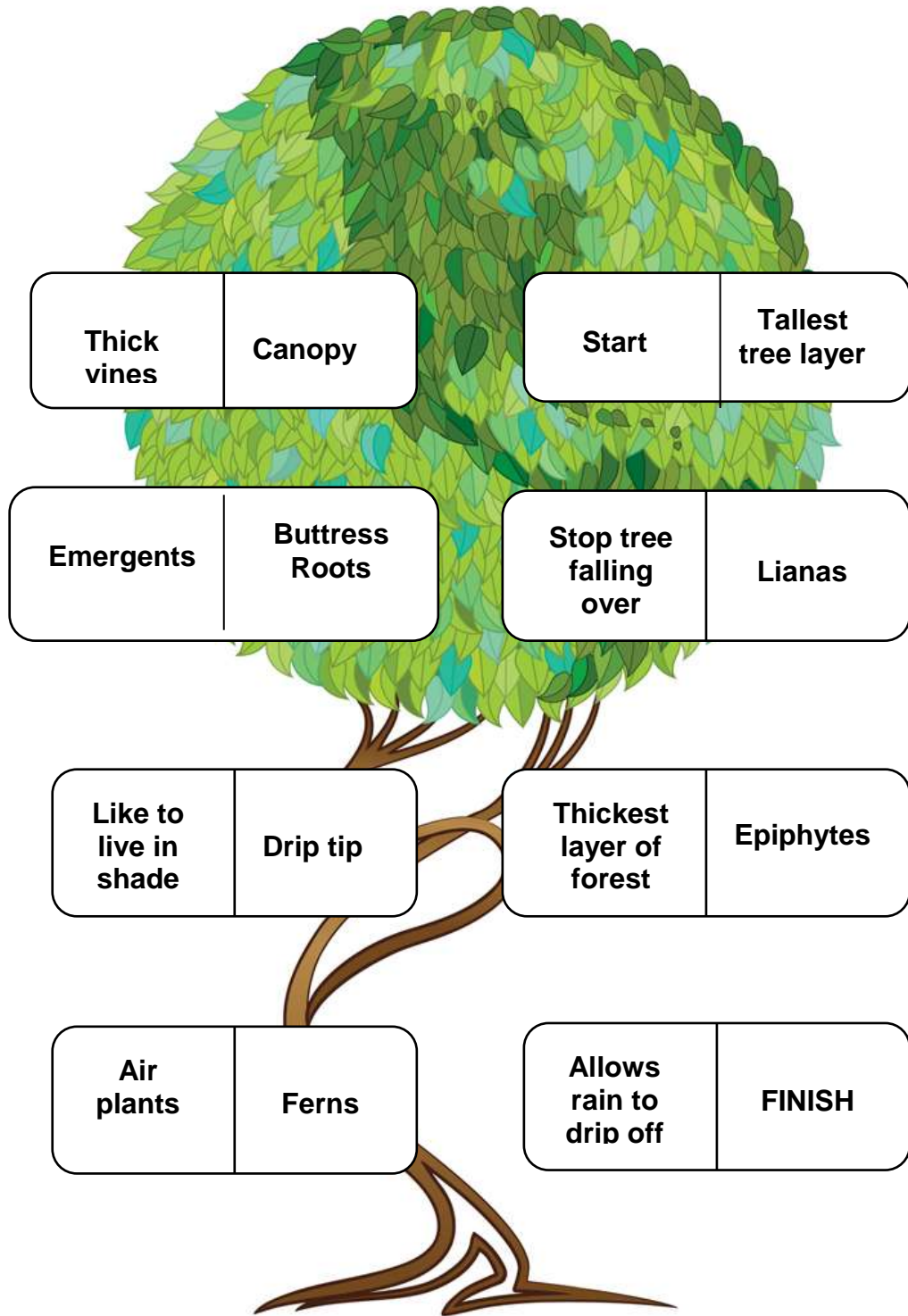
Write one fact below about each layer:

1. _____
2. _____
3. _____
4. _____



Rainforest Dominoes

Pick one colour for each key term and then use that colour to match it to its definition.



Sentence Starters – Rainforest Tree

Alive.
Wind. Leaves.
Sunlight. Humidity. Leaf Cutter Ants.
Canopy. Macaw. Tree Frog. Predator.
Rain. Tropics. Blue Morpho Butterfly. Toucan
Equator. Orchids. Howler Monkey. Sloth.
Chameleon. Habitat. Bromeliad. Prey.
Primates. Anaconda. Coast Rica. Vines. Ferns.
Camouflage. Hummingbird. Orangutan.
Mushrooms. Mahogany Tree. Branches. Flies. Palm Tree. Wet.
Poison Dart Frog. Buttress. Flooded Amazon. Fresh Water.
Bats. Grasshoppers. Colors. Earthy. Bug Bites. Turtles. Rivers.
Piranhas. Murky Water. Lemur. Jaguar. Lianas. Scientists.
Madagascar. Pitcher Plants. Termites. Giant Owl Butterfly.
Fungus. Orb Spiders. Flowers. Thick. Damp. Nuts. Drip Tips.
Decomposers. Amazon. Understory. Boa. Cockroaches. Caves.
Webs. Borneo. Rafflesia. Human.
Green. Hot. Roots. Fruit. Tall.
Threatened. Birds.
Soil. Bird Calls.
Sounds. Seeds.
Gecko. Dirt.
Epiphytes.
Nutrients.
Energy.
Weather.
Fresh.
Toads.
Bacteria.
Trees. Bugs.
Food. Exotic.
Tails. Earth.
Sweat. Iguana. Bees.
Layers. Eggs. Oxygen.
Minerals. Rocks. Decay. Moths. Ground. Life. Protection. Learn.

Using the Rainforest tree above write 10 sentences on the next page and underline in the sentence when you use a keyword

For example: The rainforest is warm and wet all year round so there is a high level of humidity.

Sentences

1. _____

2. _____

3. _____

4. _____

5. _____

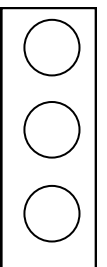
6. _____

7. _____

8. _____

9. _____

10. _____



Causes and effects of Rainforest destruction

Complete the table below

Ways of Rainforest destruction	Causes	Effects
	Cutting down of trees in the rainforest for furniture and wood.	When trees are cut down, rain washes away the soil. CO2 emissions are released into the air
	Grazing of cattle in the rainforest to make money.	The biggest cause of deforestation. Trees are burnt to clear areas. Trees and plants destroyed
	Digging to extract gold and other minerals. Heavy machinery blasts at the river banks.	
		Water floods large areas of the rainforest. Trees and animals are destroyed

