SCAVENGER HUNT

How many of these can you find ?
Colour each circle as you find it.

Something heart shaped	Something that hurts	Something shiny
Something furry	Something soft	Something that makes a noise
Something that is dead	An Alder leaf	Something delicate
Something that reminds you of yourself	Your favourite thing	A feather
Something prickly	Something used by a dinosaur	Something that has been used before

POLLUTION SLEUTH

You can be a pollution sleuth. You can tell how dirty (polluted) or clean water is by the type of minibeasts you find in it. Here are some clues to help you.

Pollution level A

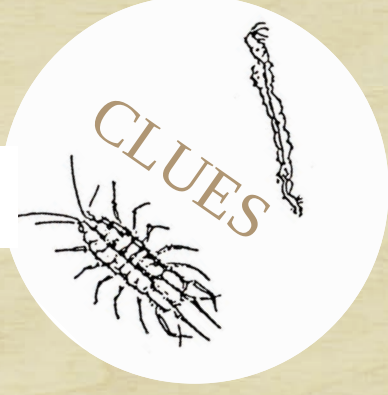
If you find these minibeasts then there is **no pollution.**

Pollution level B

If you find these minibeasts, but none from group A there is **slight pollution.**

Pollution level C

If you find these minibeasts, but none from group A or B there is **medium pollution.**



Pollution level D

If you find these minibeasts, but none from group A or B or C then is **a lot of pollution.**

Pollution level E

If you find no minibeasts at all then the water is **very polluted**

CLUES

COED Y LLANERCH

YEAR 5/6, LIVING THINGS IN THEIR ENVIRONMENT - LEAVES

INSIDE

Look at different leaf structures (compound & simple).

Work on branching keys.

Complete work sheet on common leaves.

OUTSIDE

Observation point - look at hillside view - discuss colour / type of tree etc.

Pathway to site - locate & identify different species by using key.

At site - leaf slides, leaf rubbings, leaf decomposition.

Leaf Mathematics (length, width, area). Measure the height of a tree - estimate and then use clinometer

RESOURCES

Leaf slides, pre - printed work sheet, tree name key, wax crayons & paper, card bookmark, rulers.

SPECIFIC VOCABULARY

Compound leaf, simple leaf, tree, shrub, colour, shape, area.
Comparative language similarities / differences, groupings, decomposition, fungus, insect.

KEY SKILLS

ICT - branching keys, use of camera.
Communications - estimating, group / paired work.
Mathematics - measuring, calculation.

TREE IDENTIFICATION FOR FOOTPATH

YEAR 5 / 6

Name ..... Date.....

Post Number | Left | right

Post Number | Left | right

Post Number | Left | right

Post Number | Left | right

TREE IDENTIFICATION FOR FOOTPATH

YEAR 5 / 6

Name ..... Date.....

Post Number | Left | right

Post Number | Left | right

Post Number | Left | right

Post Number | Left | right

COED Y LLANERCH

RIVER FLOW AND SPEED, YEAR 5/6

INSIDE

Work with decimals (to the nearest whole number, one decimal place, ordering of decimals, etc).

Find averages.

Use a calculator.

Discuss flow of river as it winds down the valley.

Name parts of a river from source to mouth.

Compare speed of river throughout year (look for patterns).

OUTSIDE

Measure the speed of the flow of river at different points.

Record times.

Find averages.

Explain results.

RESOURCES

Markers.
(dog biscuits, oranges, cork).
Group worksheet .
Calculators.
Stop watch.

KEY SKILLS

Numeracy: Number and place value; decimals.

ICT: Communication and Handling Data.

SPECIFIC VOCABULARY

Source, mouth, meander, bank, flow, average, total, multiplication, division.

RIVER STUDY: FLOW AND SPEED

Work as a group to find out the speed of different parts of the river.

Name ..... **Date**.....

Method

You will need a starter, finisher, time-keeper and scribe.
The starter throws in the object.
The time-keeper starts the watch.
The finisher indicates when object has reached him / her.
The time-keeper stops the watch and informs the scribe who writes down the time.
Repeat three times and find an average.
Repeat whole method for a different part of river (closer or further from river bank).

River location 1 is .....

Test	Time taken	Average Speed: (add 3 times and divide by 3)
Test 1		
Test 2		----------
Test 3		

To find out speed- metre per second, divide answer by 10	----------	**To find out speed-metre per minute, multiply by 60**	----------

River location 2 is .....

Test	Time taken	Average Speed: (add 3 times and divide by 3)
Test 1		
Test 2		----------
Test 3		

To find out speed- metre per second, divide answer by 10	----------	**To find out speed-metre per minute, multiply by 60**	----------

TEACHERS NOTES

Paints and dyes from Nature

To make dye:

- Chop material into small pieces and put in a saucepan.
- Add roughly double the amount of water to the plant material.

Simmer for 30 minutes (longer if you want a stronger colour).

Strain and cool if you are using as paint / or strain and add a natural fabric such as cotton or wool if you want to dye it.

- **dandelion flowers - yellow.**
- **Elderberries - pale purple.**
- **Rose hips - red.**
- **Netttles - green.**
- **Blackberry fruit - purple / blue.**

Experiment with different plants to see if you can find more colours. Some roots and leaves will give surprising colours e.g dandelion root gives red.

Use your colours to create a natural paints rainbow.

PAINTS AND DYES FROM NATURE

YEAR 5 / 6

INSIDE

Discuss clothes, patterns and colour.

Where does the colour come from (dye).

Where does the dye come from (some can be natural).

Research where natural dyes can come from (books and Internet).

OUTSIDE

Issue gloves to person / s collecting plants to protect skin

Collect plants, flowers etc for dyes (refer to research).

Make dye over fire (see instructions).

Dye fabric or use as paint to make a nature rainbow.

RESOURCES

Gloves, pans, water, fabric, paint-brushes, paper, string, pegs.

KEY SKILLS

Communication - Speaking and listening, reading.

ICT - Communicating and handling data.

SPECIFIC VOCABULARY

Natural dye, man-made dye, colours, simmer, chop, strain, shades, primary colour, secondary colour, double, search engine, non-fiction.

SORTING PEOPLE INTO GROUPS

Imagine you are a new teacher who does not know these children.

To identify a child (in other words, to find his or her name), the new teacher looks at the child then starts at the top of the sorting tree and chooses one of the 2 branches; depending on whether the child is a boy or a girl.

This takes the teacher to the next pair of branches, and so on, to the end of the 'twig' where you find the child's name.

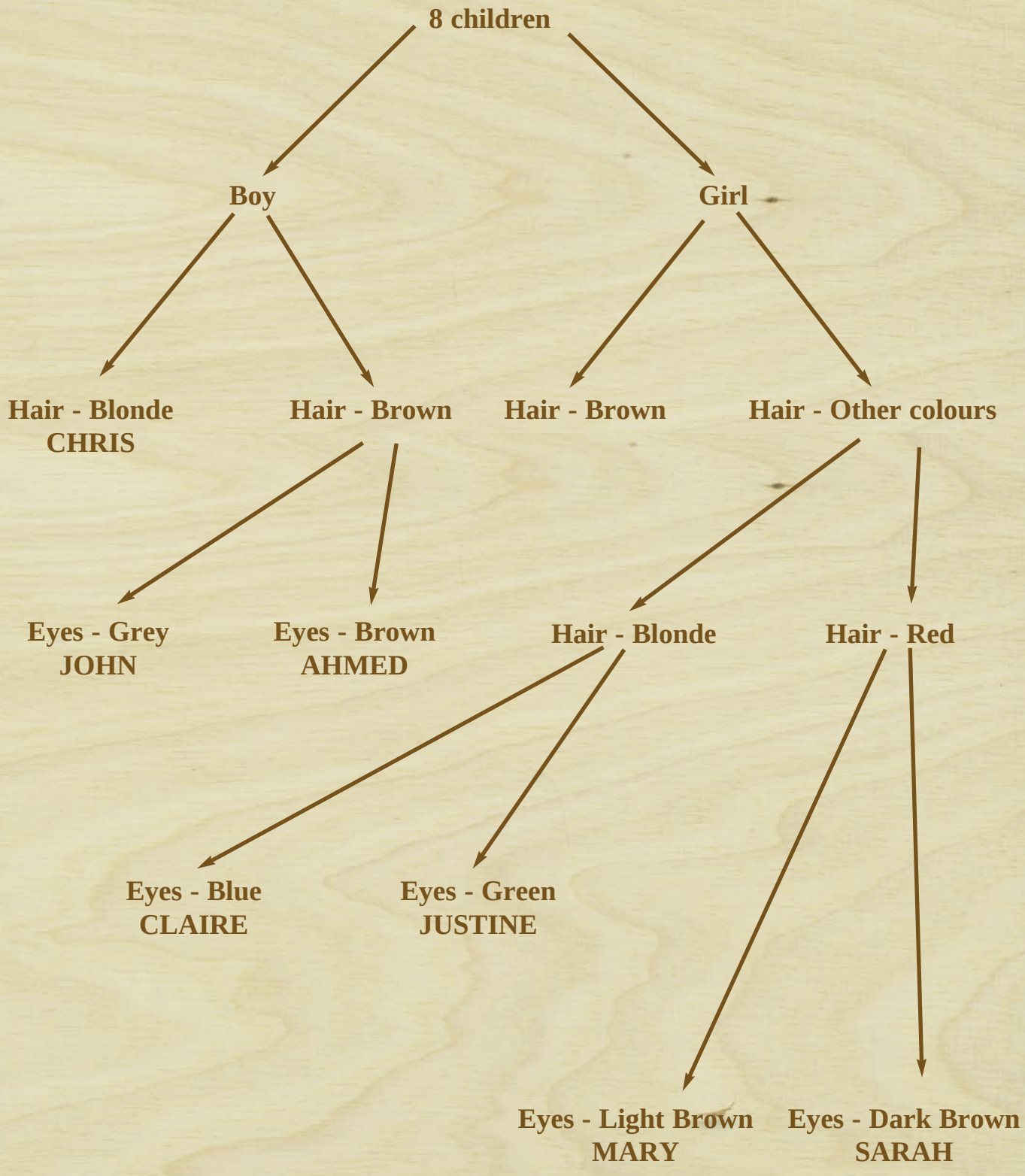
Use the sorting tree to answer these questions.

- Which girl has blonde hair and blue eyes ? ----------
- Which boy has brown hair and grey eyes ? ----------
- Ahmed has ---------- hair and ---------- eyes.
- In this group, why do you not need to know the colour of Chris'eyes ?

Draw an identikit picture of Sarah.

SORTING PEOPLE INTO GROUPS

8 children (3 boys and 5 girls) made a sorting tree for themselves. A new teacher could use this tree to identify each child by name.



SORTING PEOPLE INTO GROUPS

Draw and label the things you put into 2 groups.
Give each group a name.

This group is

.....

What was in the middle ?

.....

This group is

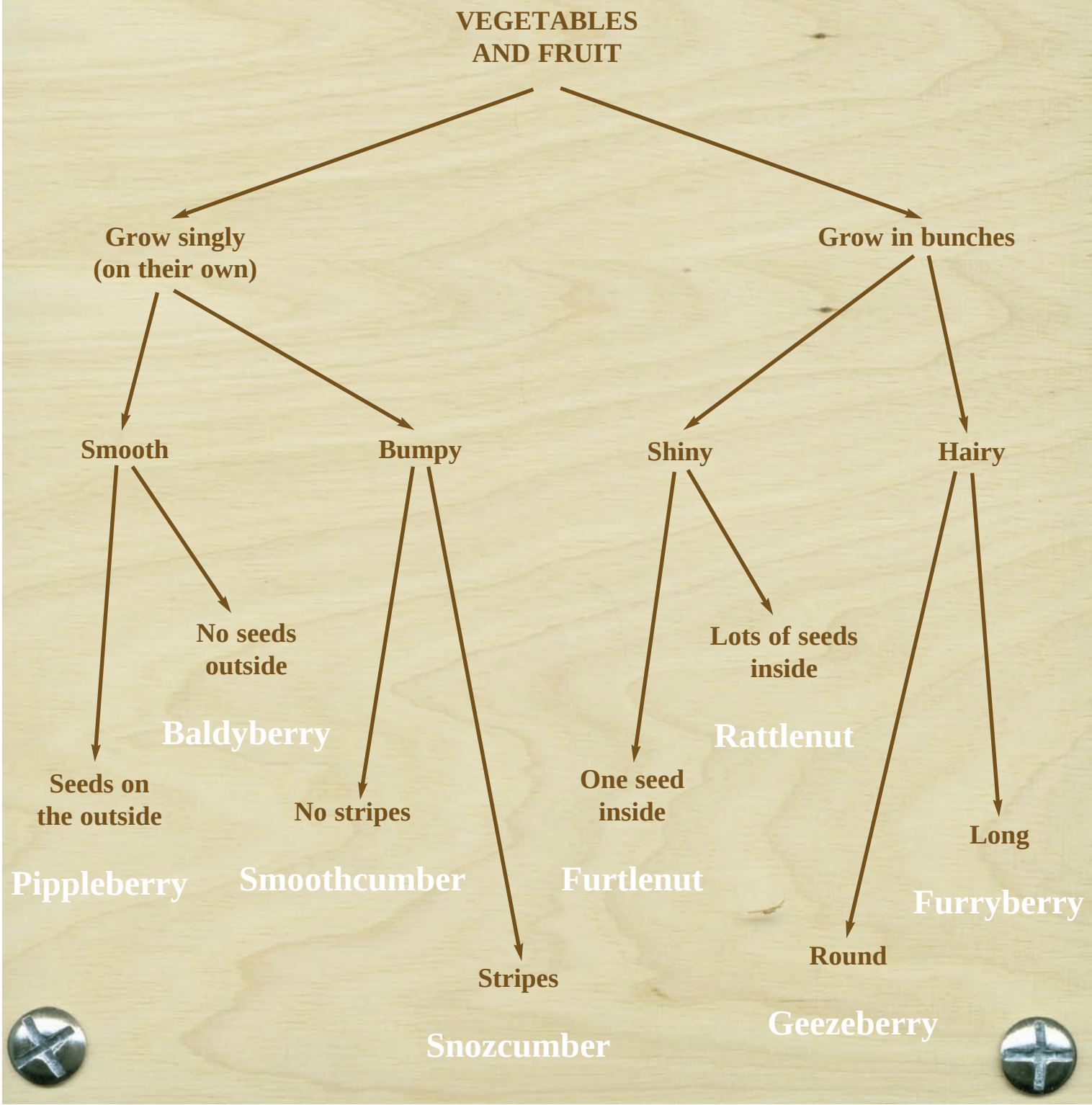
.....

SORTING PLANTS INTO GROUPS

Sort your plants into groups.

Draw an identification tree for them; writing the features which you have chosen for each branch, like the features in the boxes on this page.

(You do not have to have the same number of plants on each side). Here is an example for 8 imaginary vegetables.



THE TRUTH ABOUT BUGS BEETLES AND WOODLICE

BUGS

A bug is not just another word for an insect or a minibeast. It is a particular group of insects. They all have 4 wings and a sharp beak, hinged under their bodies They use their beak the same way you use a sharp straw to drink from a carton of Ribena to suck the juice out. Some bugs are herbivores and drink plant sap. Some bugs are carnivores and drink the juice from inside animals, like tadpoles or other insects. The Hawthorn Shield-bug and the frog-hopper are herbivorous bugs. The Water Boatman is a carnivorous bug.

BEETLES

There are more types of insect in the world than any other animal. and more types of beetles than any other insect, which means there are more types of beetles in the world than any other animal. Some beetles are less than 1mm long and others are some of the largest insects ever to have lived. Most of them have a hard shiny exoskeleton and can fly. The wings are protected by hard shiny wing cases. The Devil's Coach-horse is a scary looking carnivorous rove-beetle that you can find under logs in the woodland. Beware, it can give you a nip !

WOODLICE

Woodlice are not lice, they are crustaceans. They are related to crabs, shrimps, lobsters, scampi and lots of other shellfish that live in the sea. They breathe through gills under their ‘arms’ which have to be kept damp, like all gills do. This is why woodlice hide during the day when it is dry and warm, A mother woodlouse keeps her eggs in a pouch under her body till they hatch into tiny pink baby woodlice. She then seems to ‘give birth’ to these babies.

ANIMALS FOUND UNDER LOGS

Name ..... Date.....

1.

2.

3.

4.

5.

6.

7.

8.

BINARY KEY TO IDENTIFY COMMON MINIBEASTS

Look at your minibeast very carefully, then start at 1 on the key, answer yes or no and do what it says.

1. Legs ?	No	Go to 2
	Yes	Go to 5
2. Body in segments ?	No	Go to 3
	Yes	Go to 4
3. Soft body and a shell ?	No	Slug
	Yes	Snail
4. Long and wriggly ?	No	Grub
	Yes	Worm
5. 6 legs ?	No	Go to 6
	Yes	Insect
6. 8 legs ?	No	Go to 9
	Yes	Go to 7
7. Body in 2 parts ?	No	Go to 8
	Yes	Spider
8. Very long legs ?	No	Mite
	Yes	Harvestman
9. Scaly body with 14 legs ?	No	Go to 10
	Yes	Woodlouse
10. All the legs are the same ?	No	Caterpillar
	Yes	Go to 11
11. 1 pair of legs on each segment ?	No	Millipede
	Yes	Centipede

SORTING MINIBEASTS INTO GROUPS

Draw a minibeast in each box. Examine the animals and read the information carefully to make sure you have identified correctly.

ANNELID WORMS No legs. Long round body with many segments.	**MOLLUSCS** Soft body. No segments. Some have a coiled shell.	**INSECTS** 6 legs. Body in 3 parts. They often have wings. Young are often legless.
ARACHNIDS Body in 1 or 2 parts. 8 legs.	**CRUSTACEANS** Body has a shell and segments. 14 legs.	**MYRIAPODS** Body long and thin, with segments and lots of legs.

THE YES / NO GAME

- To play this game, you have to hold the card that your teacher gives you, against your forehead with your finger, so you can't see it. (The others can see it).
- Your job is to find out what you are, by asking other people questions about yourself.
- Remember, they can see from your card who or what you are.
- They ask you questions too. You can only answer YES or NO.
- They can only answer YES or NO to your questions.

.....

.....

.....

.....

.....

.....

.....

.....

What animal were you ? Which questions got a YES answer ?

Which of these are useful questions to ask, and which are not useful ?

Write useful or not useful next to them.

Do I have 8 legs ?.....

Do I have wings ?.....

How do I move ?.....

Do I move slowly ?.....

How old am I ?.....