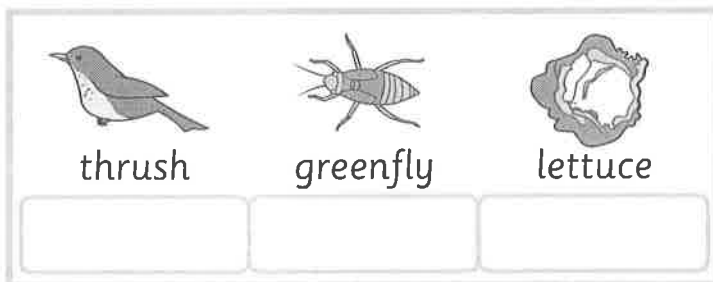
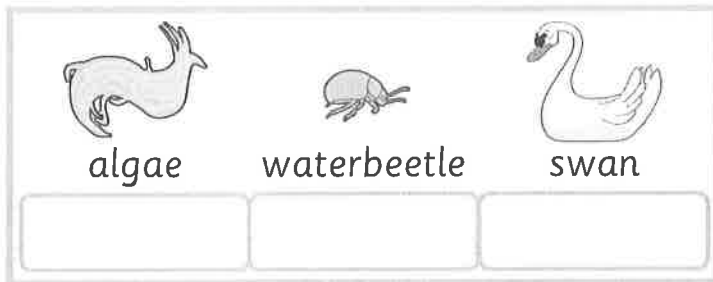
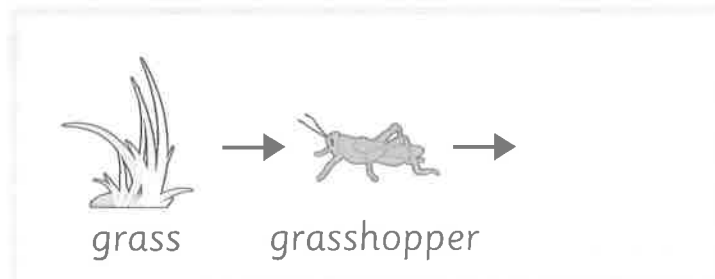
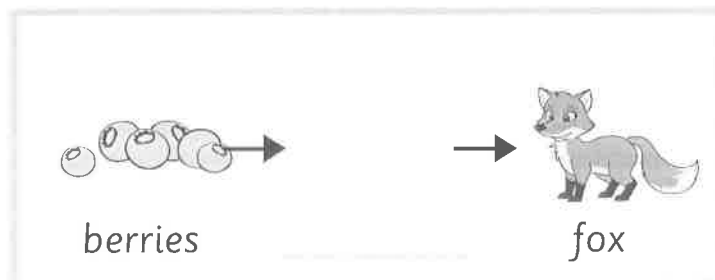


Name: _____ Class: _____

In the food chains below label the producer, prey and predator.



Now choose from these animals or plants to fill in the gaps in the following food chains. Draw and label.



Name: _____ Class: _____

In the food chains below label the producer, prey and predator.



algae

producer



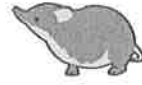
waterbeetle

prey



swan

predator



shrew

prey



nuts

producer



snake

predator



thrush

predator



greenfly

prey



lettuce

producer



rabbit

prey



owl

predator



grass

producer

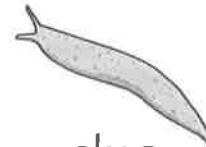
Now choose from these animals or plants to fill in the gaps in the following food chains.
Draw and label.



bullfinch



snake



slug



berries



bullfinch



fox



grass



grasshopper



snake



lettuce



slug



frog



Name: _____ Class: _____

Fill in the missing words to complete the sentences about temperature.

measure	hot	Fahrenheit	touch	dangerous	burn
ice	lollies	hot chocolate	Celsius	heat	cold



- Temperature is a measure of _____. It tells us how _____ or _____ something is. Everything has a temperature.
- We can sometimes tell the temperature of something by _____. Ice _____ feel cold. Hot drinks such as _____ feel hot. Very hot temperatures can be _____. A hot oven, a fire and boiling water are too hot to touch and could _____ us.
- Thermometers are tools that are used to _____ temperature. They come in different shapes and sizes. Thermometers are used to tell the temperature outside and in, to indicate the temperature of food and to measure body temperature.
- Temperature is measured in units called degrees _____ and _____. Degrees Celsius is used to measure the temperature of the weather.

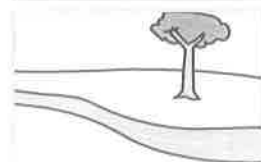
Draw arrows to show the temperature of each picture.

Circle the hot pictures red, the warm pictures yellow and the cold pictures blue.



boiling water

100°C



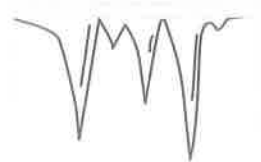
stream

3°C



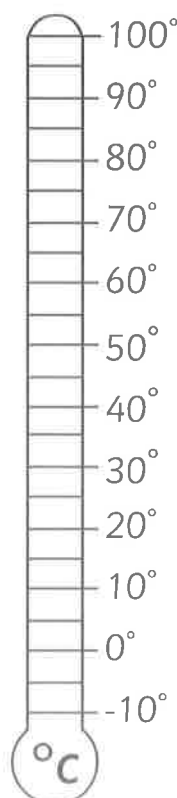
snow

-10°C



ice

0°C



52°C



warm water

40°C



Granny's hot chocolate

5°C



juice

-3°C



frozen yogurt



Name: _____ Class: _____

Fill in the missing words to complete the sentences about temperature.

measure	hot	Fahrenheit	touch	dangerous	burn
ice	lollies	hot chocolate	Celsius	heat	cold



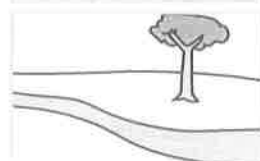
- Temperature is a measure of heat. It tells us how hot or cold something is. Everything has a temperature.
- We can sometimes tell the temperature of something by touch. Ice lollies feel cold. Hot drinks such as hot chocolate feel hot. Very hot temperatures can be dangerous. A hot oven, a fire and boiling water are too hot to touch and could burn us.
- Thermometers are tools that are used to measure temperature. They come in different shapes and sizes. Thermometers are used to tell the temperature outside and in, to indicate the temperature of food and to measure body temperature.
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Draw arrows to show the temperature of each picture.

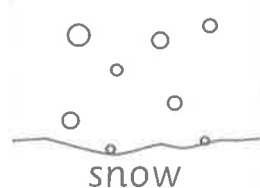
Circle the hot pictures red, the warm pictures yellow and the cold pictures blue.



boiling water



stream



snow



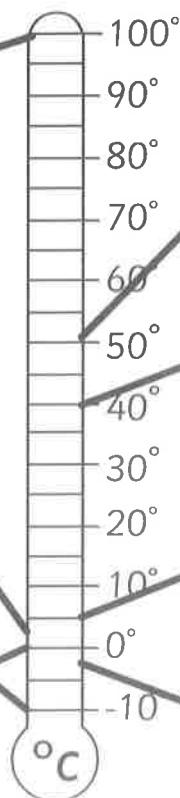
ice

100°C
hot

3°C
cold

-10°C
cold

0°C
cold



52°C
warm

40°C
warm

5°C
cold

-3°C
cold



warm water



Granny's hot chocolate



juice



frozen yogurt



Name: _____ Class: _____

Write the opposites or reverse of each of the following in the boxes below.

Reversible changes



Condensation



Freezing



Now complete the following.

Use the words liquid, solids and gas to help you explain your answers.

- 1 Evaporation happens when _____

- 2 When a liquid turns to a solid it is said to have _____

- 3 Oh no! Manu has left the box carts out all night and they have got wet. Luckily the sun has come out. What process will help them dry off?
- 4 Granny has heated up some ice cubes. What will happen to them and why?

Name: _____ Class: _____

Write the opposites or reverse of each of the following in the boxes below.

Reversible changes



irreversible

Condensation



evaporation

Freezing



melting/heating



Now complete the following.

Use the words liquid, solids and gas to help you explain your answers.

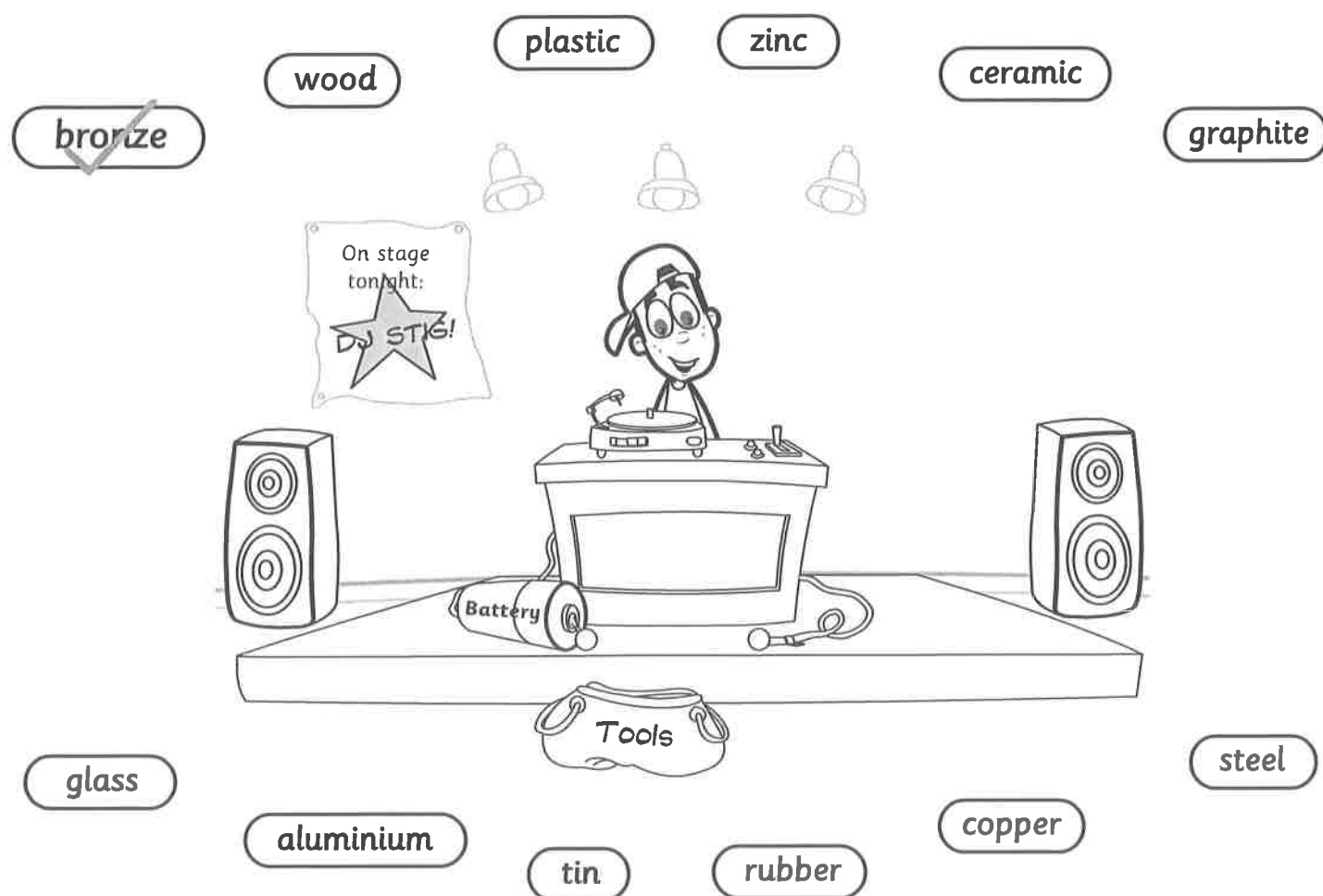
Suggested answers

- 1** Evaporation happens when **heat makes water dry up.**
Water is a liquid and it turns into a gas.
- 2** When a liquid turns to a solid it is said to have **solidified.**
- 3** Oh no! Manu has left the box carts out all night and they have got wet. Luckily the sun has come out. What process will help them dry off? **Evaporation.**
- 4** Granny has heated up some ice cubes. What will happen to them and why? **The ice cubes will melt. The heat will turn the solid into a liquid.**



Name: _____ Class: _____

Tick the materials that conduct electricity and cross out the ones that do not.
One has been done for you.



Now fill in the gaps using the words.

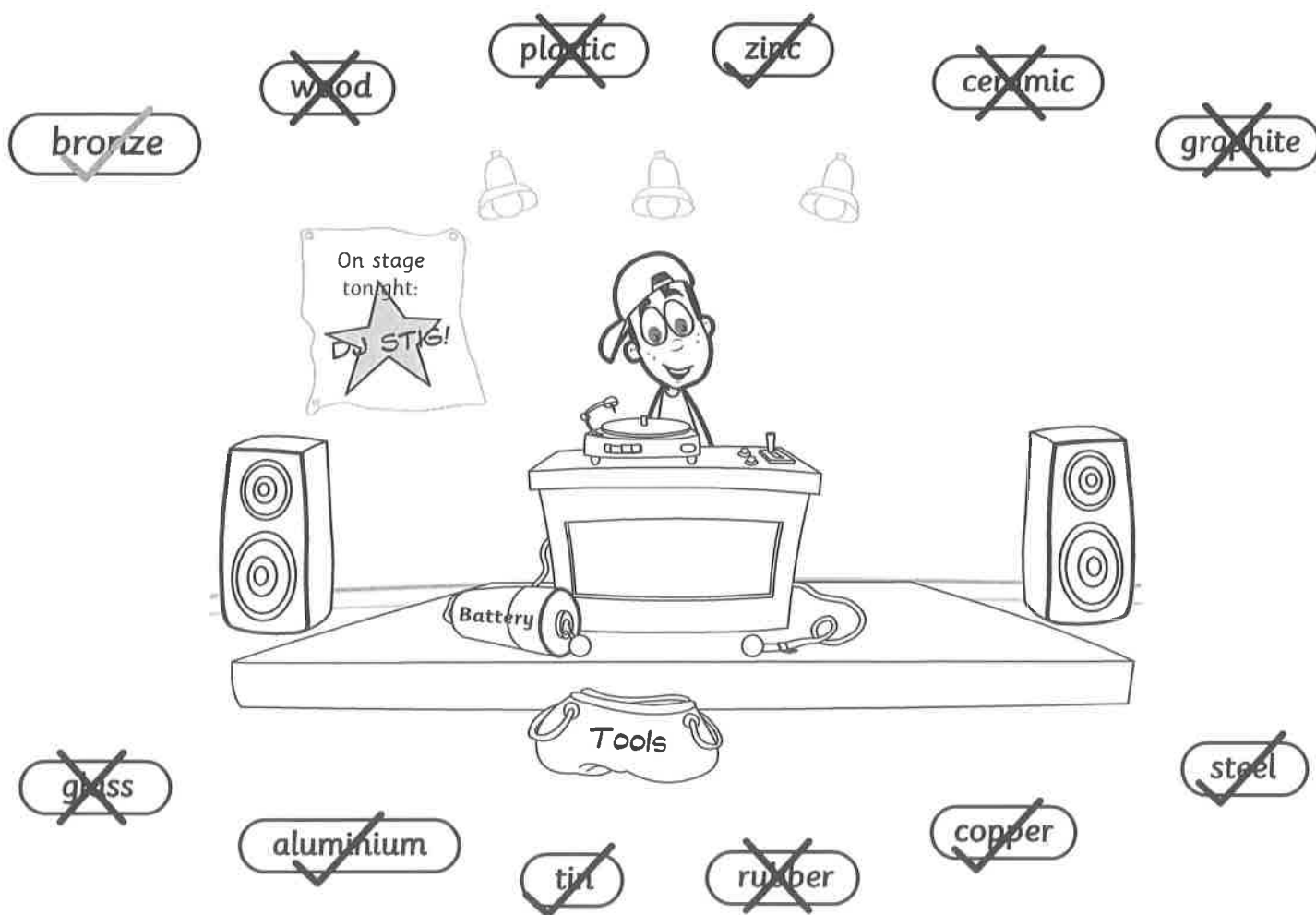
conductor lead cheap copper wire
bronze conducts expensive conductor

- 1 _____ is an electrical _____ made from copper and tin.
- 2 _____ is a metal used in solder, that helps us join things in electric circuits.
- 3 Gold is an _____ metal that _____ electricity.
- 4 _____ is a metal that most electrical wires are made from because :-
 - (a) It is a good _____ of electricity.
 - (b) It can easily be stretched into _____ without breaking.
 - (c) It is quite _____.



Name: _____ Class: _____

Tick the materials that conduct electricity and cross out the ones that do not.
One has been done for you.



Now fill in the gaps using the words.

conductor lead cheap copper wire
bronze conducts expensive conductor

- 1 wire is an electrical conductor made from copper and tin.
- 2 lead is a metal used in solder, that helps us join things in electric circuits.
- 3 Gold is an expensive metal that conducts electricity.
- 4 copper is a metal that most electrical wires are made from because :-
 - (a) It is a good conductor of electricity.
 - (b) It can easily be stretched into wire without breaking.
 - (c) It is quite cheap.



Name: _____ Class: _____

Fill in the blanks with either 'higher' or 'lower'.

- 1 A small whistle will make pitched sounds than a bigger whistle.
- 2 A large drum will make pitched sounds than a smaller drum.
- 3 If you tighten the skin on a drum it makes the pitch
- 4 If you make the length of a guitar string shorter you make the pitch
- 5 If you tighten a guitar string, by turning its key, you make its pitch
- 6 On a guitar the thicker strings have a pitch.

Use the words below to complete the sentences.

strings

vibrations

skin

air

- 7 Sounds are made by
- 8 On a guitar the vibrate.
- 9 In a whistle the inside it vibrates.
- 10 On a drum the vibrates.





Name: _____ Class: _____

Fill in the blanks with either 'higher' or 'lower'.

- 1 A small whistle will make **higher** pitched sounds than a bigger whistle.
- 2 A large drum will make **lower** pitched sounds than a smaller drum.
- 3 If you tighten the skin on a drum it makes the pitch **higher**.
- 4 If you make the length of a guitar string shorter you make the pitch **higher**.
- 5 If you tighten a guitar string, by turning its key, you make its pitch **higher**.
- 6 On a guitar the thicker strings have a **lower** pitch.

Use the words below to complete the sentences.

strings

vibrations

skin

air

- 7 Sounds are made by **vibrations**.
- 8 On a guitar the **strings** vibrate.
- 9 In a whistle the **air** inside it vibrates.
- 10 On a drum the **skin** vibrates.



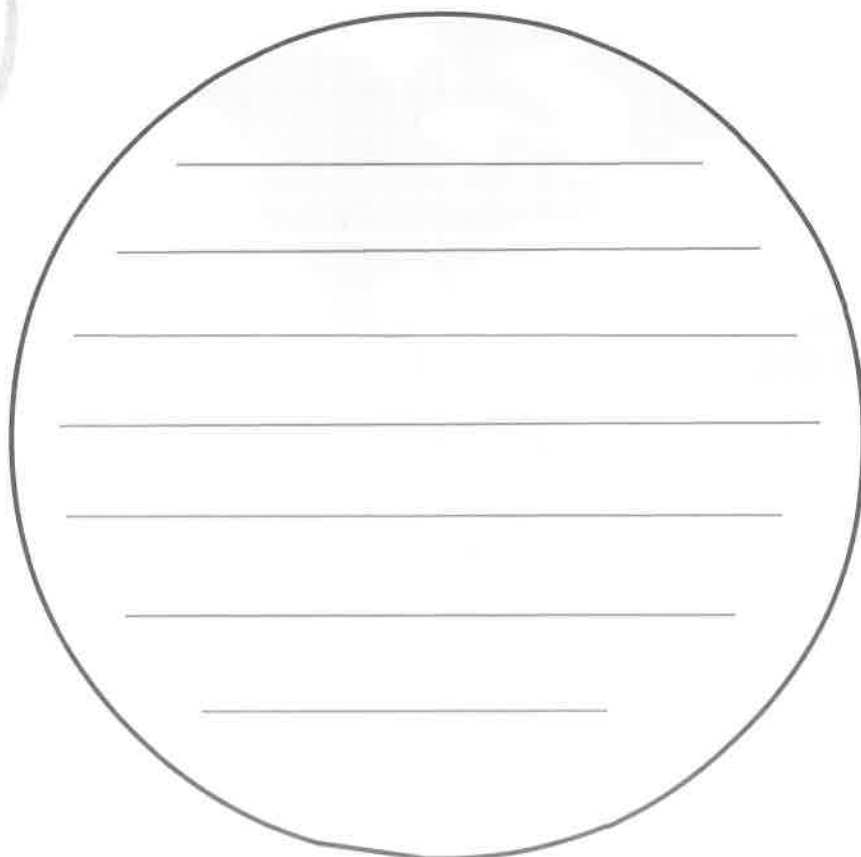


Name: _____ Class: _____

In what ways can humans affect the environment?
List as many harmful and beneficial ways that you can think of.

Positive effects on the environment	Negative effects on the environment

How can humans support the environment?





Name: _____ Class: _____

In what ways can humans affect the environment?
List as many harmful and beneficial ways that you can think of.

Positive effects on the environment

Negative effects on the environment

Suggested answers

Planting more trees.
Caring for endangered
species.

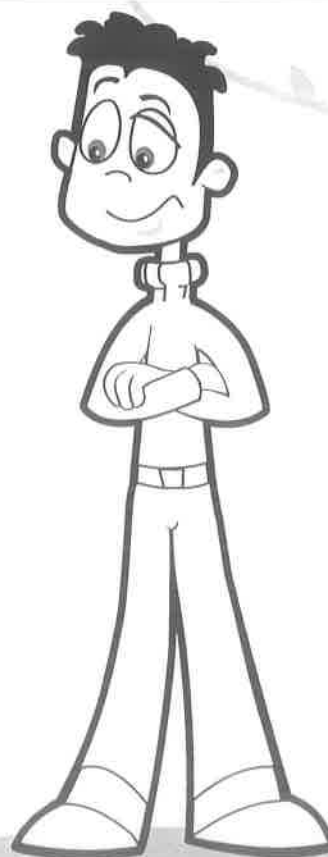
Pollution from industry.
Litter.

How can humans support the environment?

Suggested answers

Recycling

Replanting trees



Overview

In this 60 minute activity, pupils consider a range of ways that humans can impact on the environment. They highlight the positive and negative aspects of human activity and then take on the role of a supporter or protestor and formulate an argument for a debate. Additional time will be needed to carry out the debate.

Resources and Preparation

- Access to the online activity
- Class whiteboard and pen
- Large pieces of sugar paper and pens
- Organise the class into six groups

Lesson Structure

0 – 5 minutes – Explain to the pupils that you would like them to think about the effect that humans can have on the environment. Ask them what they think you mean by this and record their ideas on the whiteboard.

5 – 15 minutes – Show the pupils the on-line activity and pause to discuss the issues raised. Once the activity has been played through, ask pupils how their thinking has developed following on from the activity.

15 - 25 minutes – Explain to the pupils that you would like them to consider one particular issue, e.g. building development, agriculture or industry and to think about the reasons why humans may engage in the activity. Organise the class so that two groups cover each subject and ask them to record their ideas on the sugar paper. As the pupils work, circulate to support their understanding.

25 - 35 minutes – Tell the pupils to leave their pieces of sugar paper on their tables and draw the class back together. Ask them to circulate to read each other's ideas. Then bring everyone back together and discuss each issue in turn.

25 - 30 minutes – Ask pupils whether they think that this type of human activity is necessary and if so why, or if not, why not. Explain that you would like to hold a debate to consider 'Is this human activity necessary?' Organise the class so that one group who made a poster on industry takes the stance that it is necessary while the other group argues against it.

30 - 45 minutes – Allow time for the pupils to formulate their arguments and circulate to support their ideas. Stop the class as and when necessary to share thoughts.

45 – 60 minutes - plenary - Once the pupils have drafted their argument, draw them back together and ask them to share their ideas. Additional time will need to be set aside for the debate.



Name: _____ Class: _____

Find the variables in each experiment.

Then decide if the test is a fair test.

- 1** Manu wanted to investigate whether a ball would bounce higher on a hard or soft surface.

First, he dropped a small ball onto a wooden floor.

Then he measured how high it bounced.

Then he dropped a medium sized ball on to a carpet and measured how high it bounced.



Variables: _____

Is this a fair test? _____

- 2** Klara wanted to find out if sugar dissolves as quickly in cold water as it does in hot water.

She poured 200 ml of cold water into a 500 ml jug and 200 ml of hot water into another 500 ml jug.

She then added 5 teaspoons of sugar to the hot water and stirred it with a spoon until it had all dissolved.

She timed how long it took for the sugar to dissolve.

She then added 5 teaspoons of sugar to the cold water and again stirred it in until it had all dissolved.

Again she timed how long it took for the sugar to dissolve.

Variables: _____

Is this a fair test? _____

- 3** Star wanted to investigate whether a car would travel faster on a wooden ramp or a carpeted ramp.

She pushed a red car down the wooden ramp and timed how long it took for the car to reach the bottom of the ramp.

She placed a blue car at the top of the carpeted ramp and allowed it to roll down.

Again, she timed how long it took for the car to reach the bottom of the ramp.

Variables: _____

Is this a fair test? _____

Which of the tests are not fair?

On the back of the sheet choose one of them and rewrite it so that it becomes a fair test.



Name: _____ Class: _____

Find the variables in each experiment.
Then decide if the test is a fair test.

- 1** Manu wanted to investigate whether a ball would bounce higher on a hard or soft surface.

First, he dropped a small ball onto a wooden floor.

Then he measured how high it bounced.

Then he dropped a medium sized ball on to a carpet and measured how high it bounced.



Variables:

surface, ball size

Is this a fair test? **no**

- 2** Klara wanted to find out if sugar dissolves as quickly in cold water as it does in hot water.

She poured 200 ml of cold water into a 500 ml jug and 200 ml of hot water into another 500 ml jug.

She then added 5 teaspoons of sugar to the hot water and stirred it with a spoon until it had all dissolved.

She timed how long it took for the sugar to dissolve.

She then added 5 teaspoons of sugar to the cold water and again stirred it in until it had all dissolved.

Again she timed how long it took for the sugar to dissolve.

Variables:

**amount of water, water temperature,
amount of sugar, stirring/not stirring**

Is this a fair test? **yes**

- 3** Star wanted to investigate whether a car would travel faster on a wooden ramp or a carpeted ramp.

She pushed a red car down the wooden ramp and timed how long it took for the car to reach the bottom of the ramp.

She placed a blue car at the top of the carpeted ramp and allowed it to roll down.

Again, she timed how long it took for the car to reach the bottom of the ramp.

Variables:

surface, type of car, pushing/rolling

Is this a fair test? **no**

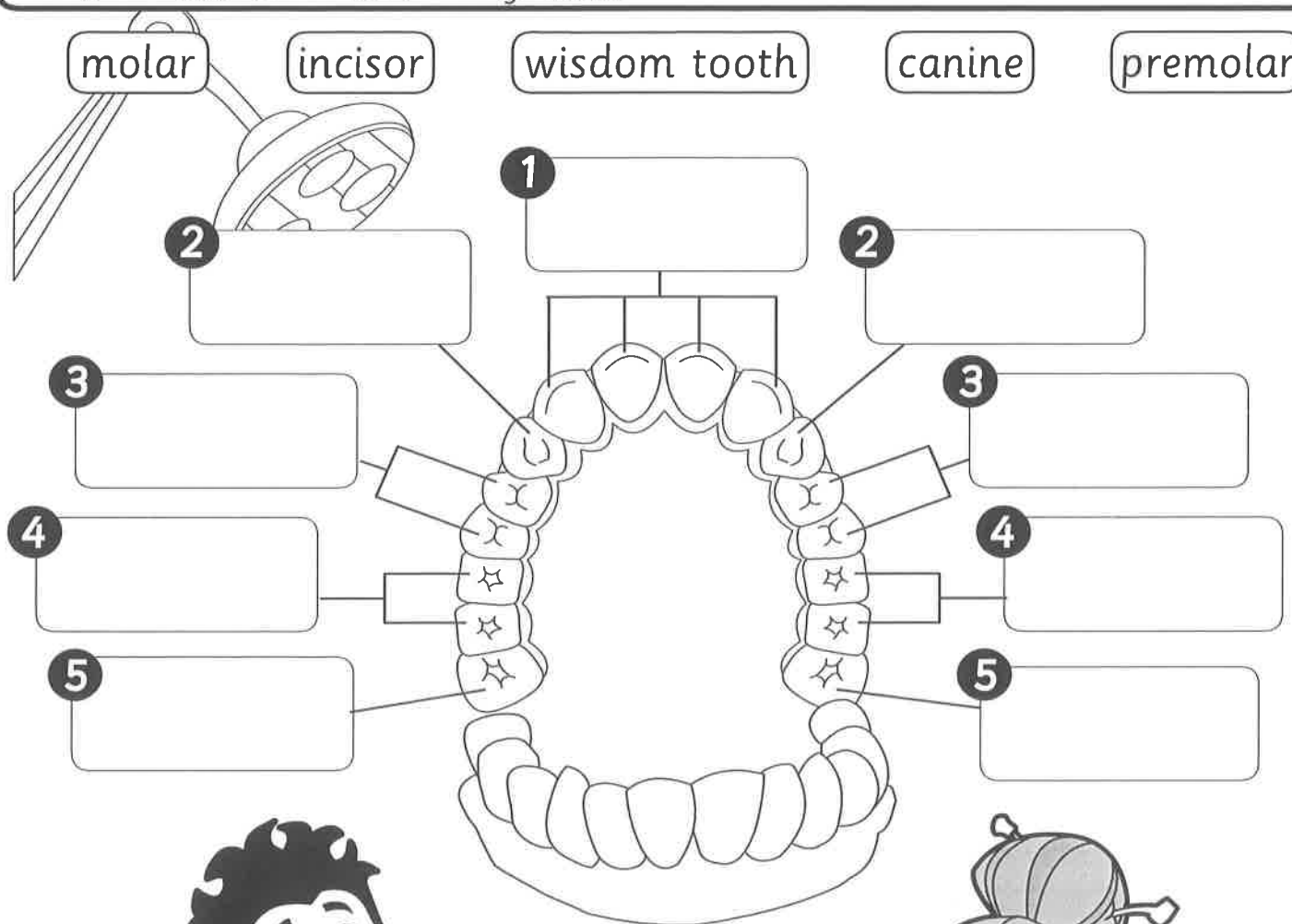
Which of the tests are not fair?

On the back of the sheet choose one of them and rewrite it so that it becomes a fair test.



Name: _____ Class: _____

Use the words below to label Granny's teeth.



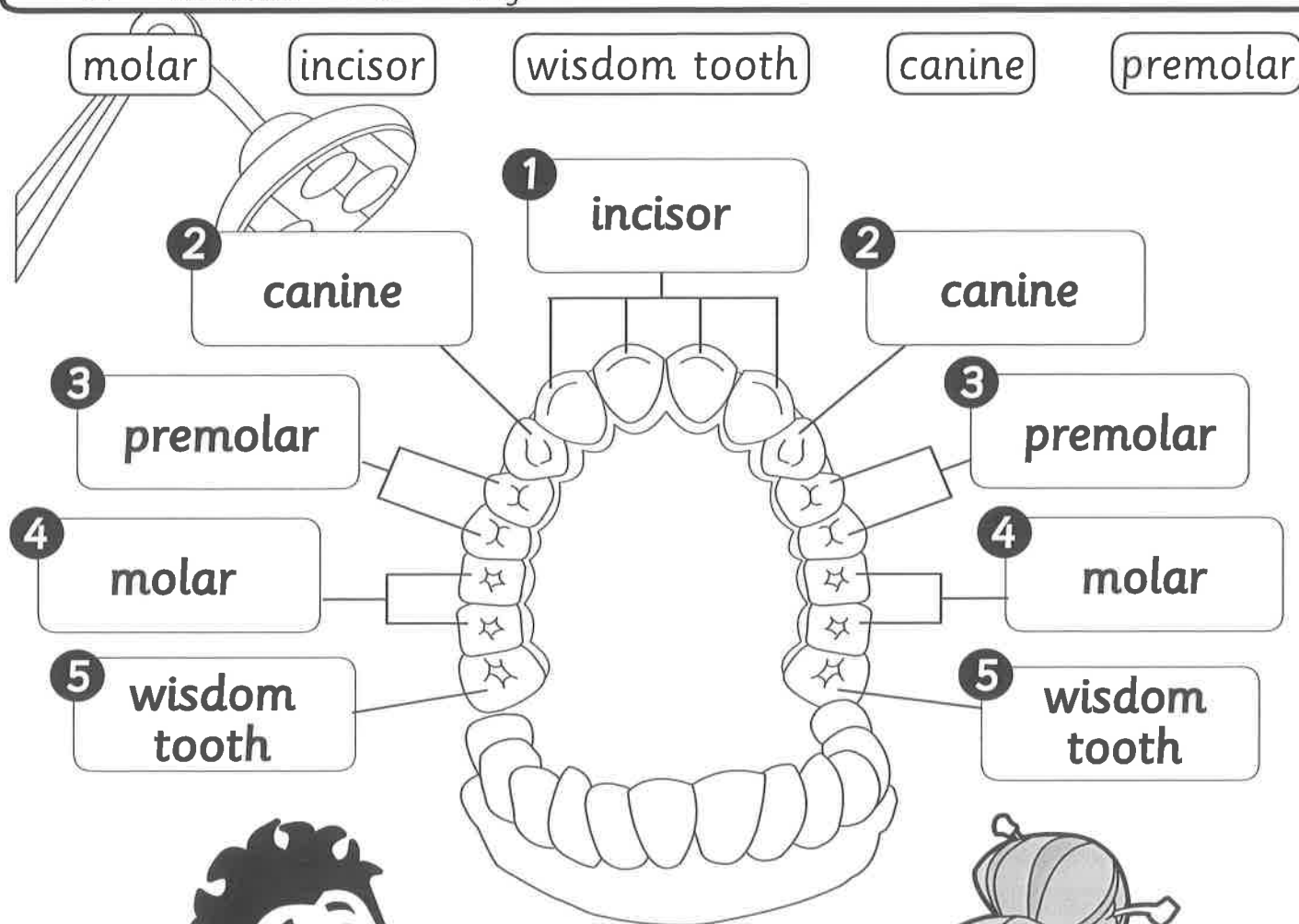
Now complete the sentences.

- (a) The pointed teeth near the front of your mouth are called _____.
- (b) The flat teeth at the back of your mouth are called _____.
- (c) The sharp teeth at the front of your mouth are called _____.



Name: _____ Class: _____

Use the words below to label Granny's teeth.



Now complete the sentences.

- (a) The pointed teeth near the front of your mouth are called canines.
- (b) The flat teeth at the back of your mouth are called molars.
- (c) The sharp teeth at the front of your mouth are called incisors.



Name: _____ Class: _____

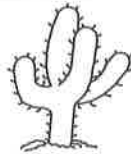
Put all the living things into the correct place on the T-charts.
One has been filled in to get you started.



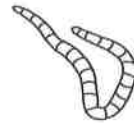
frog



ladybug



cactus



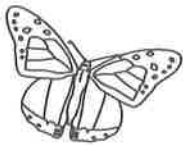
earthworm



dolphin



grass



butterfly



cat



snail



fir tree

1		2	
can move from place to place	cannot move from place to place	plant	not a plant
frog			

Now put all of the animals into these carrol diagrams.

3		4	
mammal	not a mammal	invertebrate	not an invertebrate





Name: _____ Class: _____

Put all the living things into the correct place on the T-charts.
One has been filled in to get you started.



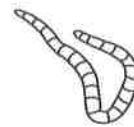
frog



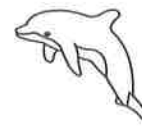
ladybug



cactus



earthworm



dolphin



grass



butterfly



cat



snail



fir tree

1

can move from
place to place

frog
ladybug
earthworm
dolphin
snail
butterfly
cat

cannot move from
place to place

cactus
grass
fir tree

2

plant

cactus
grass
fir tree

not a plant

frog
ladybug
earthworm
dolphin
snail
butterfly
cat

Now put all of the animals into these carrol diagrams.

3

mammal

dolphin
cat

not a mammal

frog
ladybug
earthworm
snail
butterfly

4

invertebrate

ladybug
earthworm
snail
butterfly

not an invertebrate

dolphin
cat
frog

