



Year 7 Science

Classification

**HOMEWORK
BOOK**



Find-a-word



Animalia

Family

Phylum

Archaea

Fungi

Plantae

Autotrophic

Genus

Protista

Bacteria

Heterotrophic

Species

Class

Kingdom

Taxonomy

Domain

Multicellular

Unicellular

Eubacteria

Order

Grouping

Here is a list of living things.

dolphin	tree	flower	elephant	snail	toad
mushroom	seaweed	crab	jellyfish	fern	emu
goanna	stonefish	cactus	carrot	whale	worm

1. Organise them into two groups.

GROUP 1	GROUP 2

2. Which characteristics did you use to decide how to group these living things?

.....

.....

3. Now organise your **GROUP 1** living things into a further two groups.

4. Which characteristics did you use to decide how to group them this time?

.....

.....

5. Now organise your **GROUP 2** living things into a further two groups.

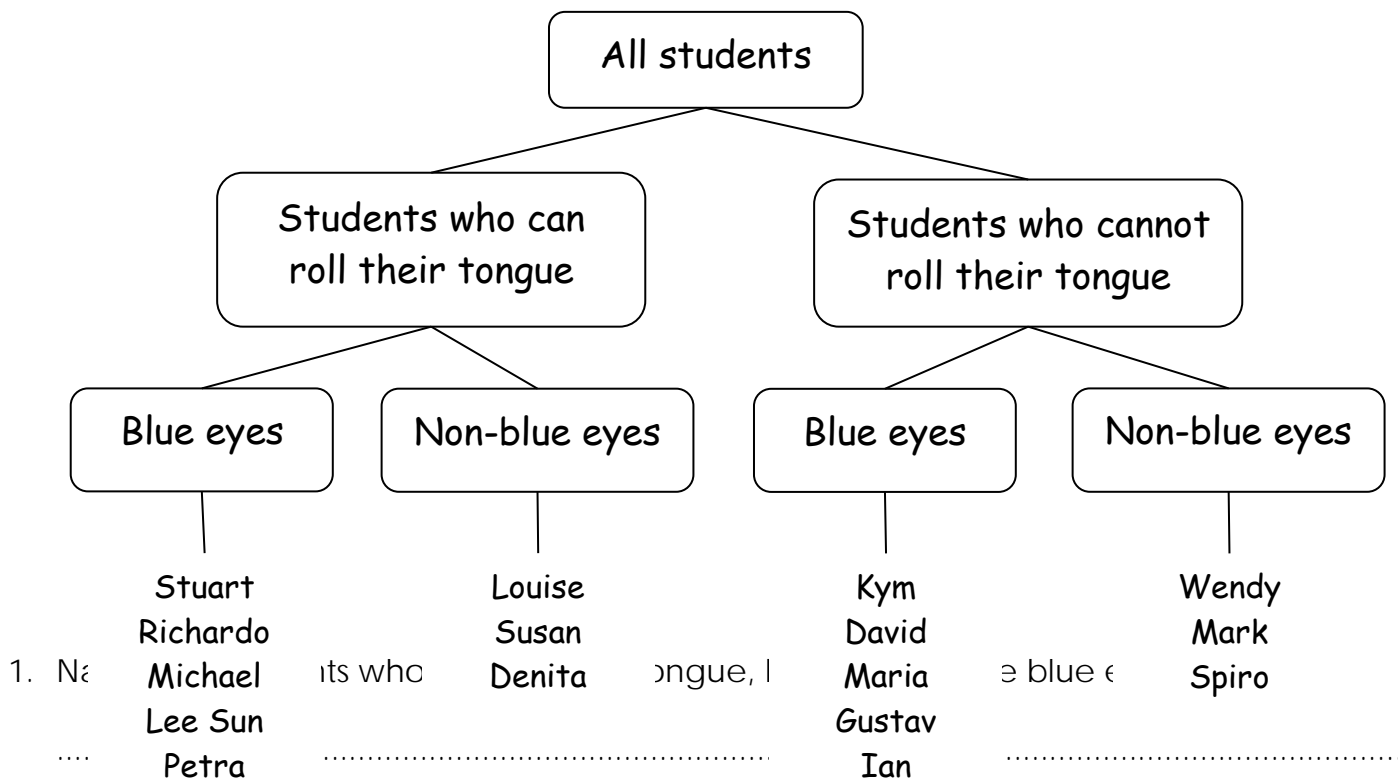
6. Which characteristics did you use to decide how to group them this time?

.....

.....

Dichotomous keys

Look at the following key for classifying students in a class.



Scientific naming

From kingdom to species

Skills: literacy, interpretation, understanding

To scientifically name animals you need to know the meaning of the Latin and Greek names that are used. Below is a small selection to allow you to name your imaginary animals. To combine the words, sometimes you will need to drop letters, like an 's' at the end. Sometimes you will have to add letters, like 'e', 'i' or 'o' in the middle, or 'us' or 'um' at the end.



What it does		How it looks		Its body	
<i>bates</i>	walker	<i>acantho-</i>	prickly	<i>arctos</i>	bear
<i>blanos</i>	blind	<i>acoce-</i>	pointed	<i>canis</i>	dog
<i>carnis</i>	meat	<i>brun</i>	brown	<i>dactyl</i>	fingered
<i>edestes</i>	eater	<i>cinereus</i>	grey	<i>entomon</i>	insect
<i>gradus</i>	step or walk	<i>deinos</i>	terrible	<i>gamba</i>	hoof
<i>hyphantes</i>	weaver	<i>erio-</i>	woolly	<i>glossus</i>	tongue
<i>idris</i>	skillful	<i>lasios</i>	hairy	<i>mastax</i>	mouth or jaw
<i>necto</i>	swimming	<i>halus</i>	dark	<i>ovis</i>	sheep
<i>odorus</i>	smelling	<i>nefrens</i>	toothless	<i>-ondon</i>	toothed
<i>malus</i>	bad	<i>obesus</i>	fat	<i>pithecus</i>	monkey
<i>sulcata</i>	digging	<i>pygmaeus</i>	dwarf or little	<i>phascolo-</i>	pouch
<i>venator</i>	hunter	<i>trachys</i>	rough	<i>rhamphos</i>	curved beak
<i>vorus</i>	eating	<i>tri-</i>	three	<i>sauros</i>	lizard

Questions

- 1 Use the above names to find the meaning of *Phascolarctos cinereus*. Identify the unique Australian animal that has this scientific name.

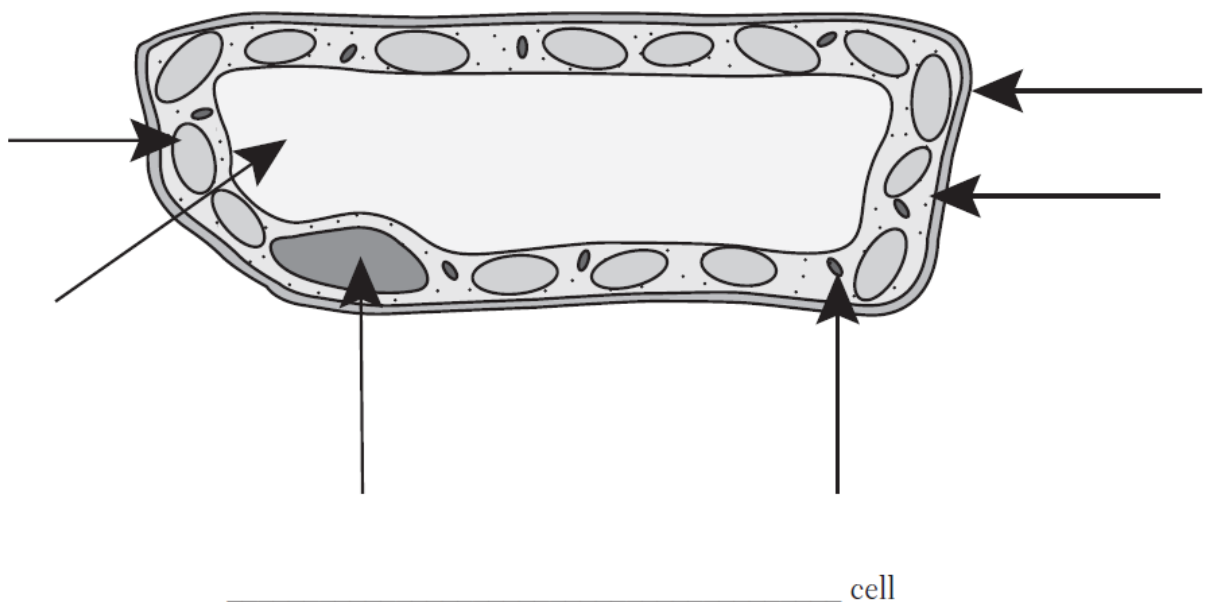
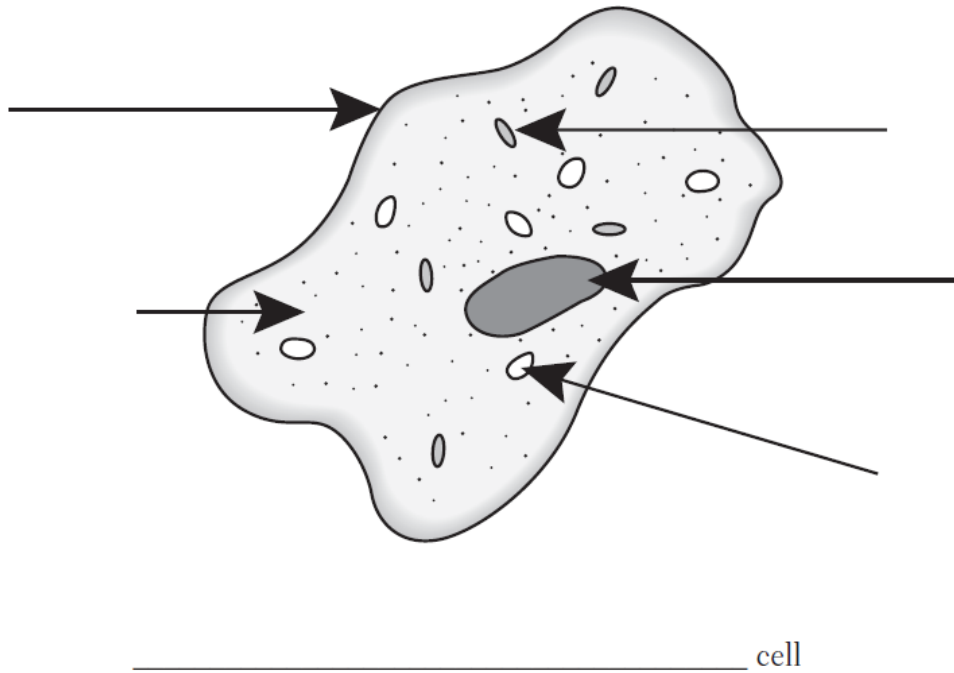
- 2 Describe what you think an *eriovisus* might be.

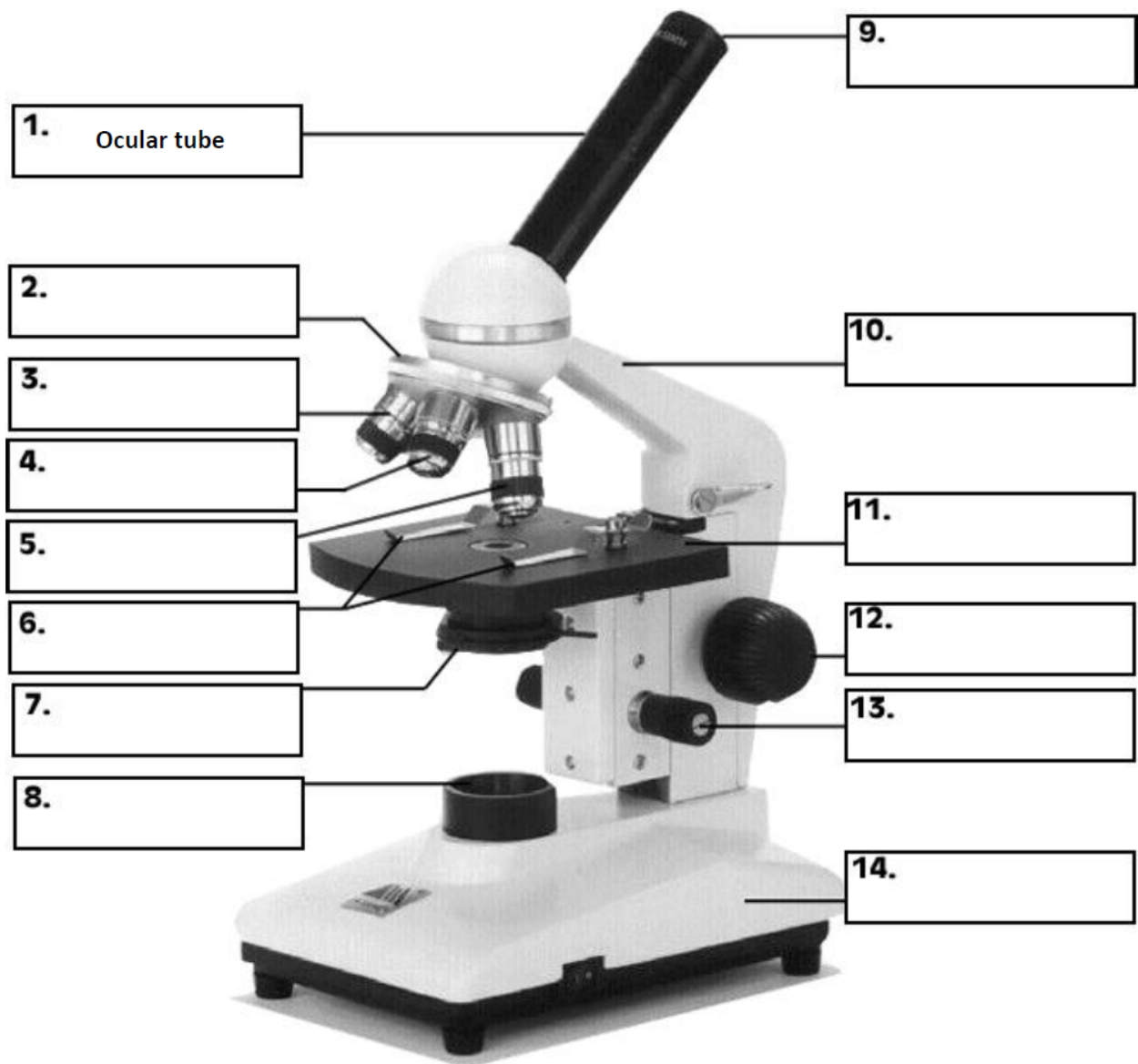
- 3 You have just found an *entomonisulcata* in the garden. Explain what this is.

- 4 Propose a scientific name for a lizard with a very pointed tongue.

- 5 Propose a name for a new species of monkey that you have discovered, that only has three fingers on each hand.

- 1 Label each of the parts and identify the cell type.
- 2 Outline the function of each cell part.





The power of a lens tells how many times it will magnify. To find out how many times an object is magnified, **multiply the eyepiece lens power by the objective lens power**. Find the total low power magnification and the total high power magnification of the microscopes in the table below.

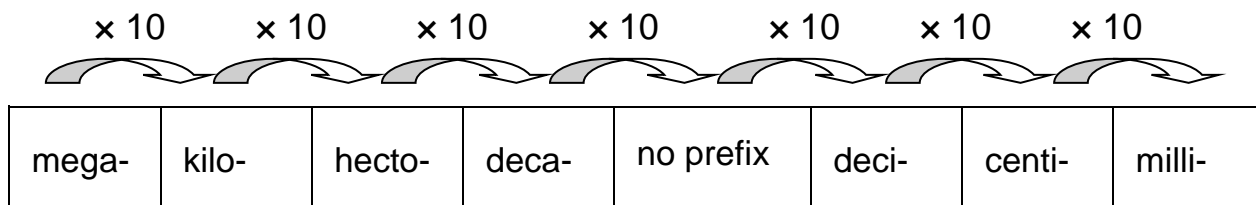
Lens Magnification			Total Magnification	
Eyepiece Lens	Objective Low Power Lens	Objective High Power Lens	Low Power	High Power
4x	10x	40x		
10x	10x	43x		
8x	10x	50x		



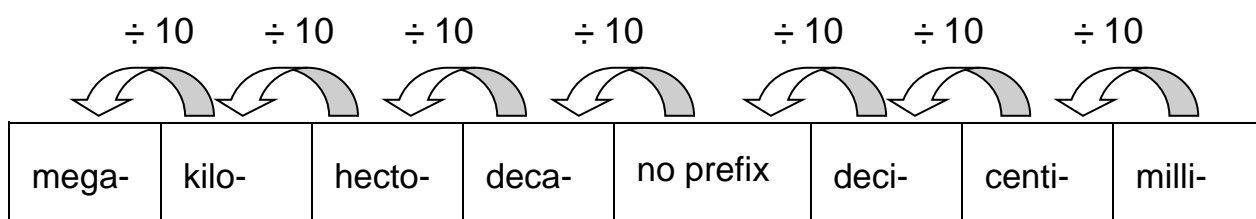
In the metric system, converting from one prefix to the next prefix is a simple matter of multiplying or dividing by 10.

Note that this **does not** work when the units are squared (²) or cubed (³) as in area and volume measurements.

When the prefixes get smaller, **multiply by 10** for each step.



When the prefixes get larger, **divide by 10** for each step.



1 Change the following measurements using the units given.

The first two have been done for you.

Measurement	Convert to	Conversion	Answer
2 megalitres	kilolitres	2×10	200 kL
20 milligrams	grams	$20 \div 10 \div 10 \div 10$	0.02 g
3 kilopascals	hectopascals		
5.4 centimetres	millimetres		
0.7 millilitres	litres		
650 millimetres	decimetres		
12 000 watts	kilowatts		
97 000 millilitres	decalitres		