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For ages 10+

LET'S DO SCIENCE

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Contents

Teachers' Notes	4
Observations	6
Testing Your Powers of Observation	7
How Well Do You Notice Things?	8
Totally Observant!	9
Types of Observations	10
Making Measurements	11
Non-Fishy Scales	12
Data - 1	13
Data - 2	14
How High is That Plant? - 1	15
How High is That Plant? - 2	16
The Growing Metal - 1	17
The Growing Metal - 2	18
Tricky Line Graphs - 1	19
Tricky Line Graphs - 2	20
Using Observations	21
More About Inferences	22
But That's Not Fair!!	23
Is That Fair?	24
Let's Settle This	25
More Fair Tests	26
The Christmas Wrapping Puzzle	27
The Mystery of the Broken Torch	28
Greenish - b?	29
Variables	30
Naming Variables	31
Safety	32
Testing Ideas	33
Hot or Cold? - 1	34
Hot or Cold? - 2	35
Big or Little? - 1	36
Big or Little? - 2	37
To Stir Or Not To Stir?	38
What Makes Seeds Sprout? - 1	39
What Makes Seeds Sprout? - 2	40
What Makes Seeds Sprout? - 3	41
What Makes Seeds Sprout? - 4	42
What Do You Want to Test? - 1	43
What Do You Want to Test? - 2	44
Black or Silver - 1	45
Black or Silver - 2	46
Answers	47

Name: _____

Testing Your Powers of Observation

Sit with a partner. From your pencil cases, take a total of ten items and place them on your desk. Remove everything else from the desk. You will also need something to cover the items.

Firstly, one person studies the items for two minutes. The person is not allowed to write any notes.

Next, the second person covers the items and the first person describes them in as much detail as possible, in the space below.

The ten items are...

1. _____	6. _____
_____	_____
2. _____	7. _____
_____	_____
3. _____	8. _____
_____	_____
4. _____	9. _____
_____	_____
5. _____	10. _____
_____	_____

Sample

Now swap your items with another group and the second person observes the items and tries to remember them.

Look at the pictures below. Can you spot the ten differences? Circle them.



Name: _____

Making

Measurements

When we make measurements, we often use special instruments.

Match the type of measurement with the instrument used by joining the pictures. Once you've finished, write the capital letter next to each picture in the corresponding space below. If you do it correctly, you should find the answer to this question.

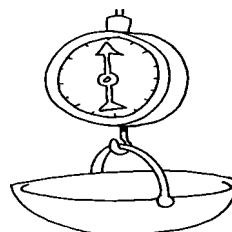
"What is the name of a large, greenish, Australian freshwater food fish?"

1



How long?

M



2

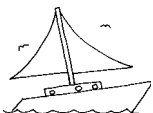


How heavy?

R

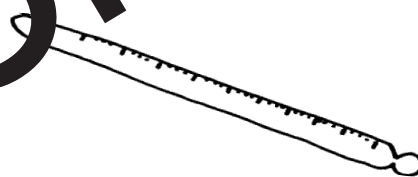


3

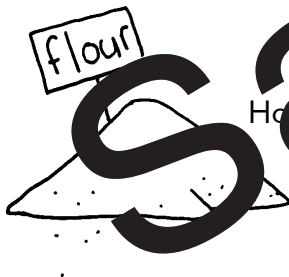


How long?

Y



4



How heavy?

A

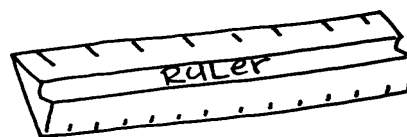


5

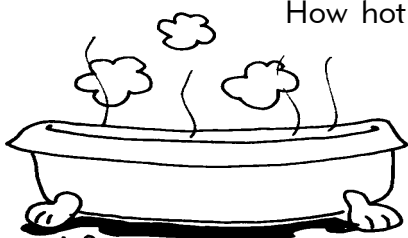


How much?

R

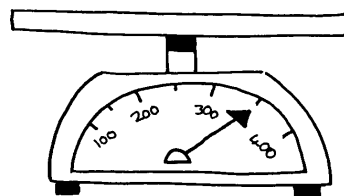


6



How hot?

U



2 4 1 5 3 6

The large, greenish, Australian freshwater food fish is the

--	--	--	--	--	--

 cod.

Name: _____

Data - 1

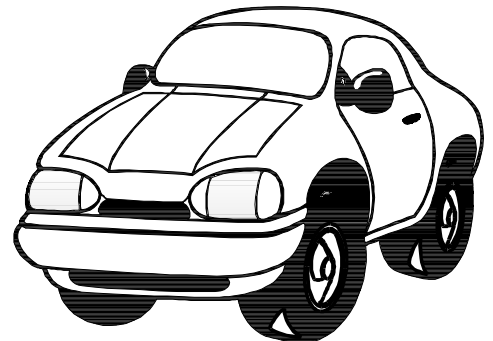
A group of observations or measurements is called *data*. Data is information that scientists can use to help explain things and to help answer questions.

When scientists collect data, they can arrange it in a number of ways so it is easier to understand.

Now, you will collect information (data) and arrange it in a table and a graph. Your teacher will take you outside to do this activity. You will need this worksheet and a pen.

1. Go to the school carpark.
2. Count the number of white cars, and write this number down in the space in the table below.
3. Do the same for the blue cars.
4. Continue counting the number of cars of each different colour until you have counted all the cars. If there are some cars in the carpark with colours that aren't listed in the table, you can add them in the spaces provided.

Different colours of cars in our school carpark on _____	
Colour of Car	Number of Cars
White	
Blue	
Green	
Red	
Black	
Yellow	
Silver	



- a) How many red cars were there? _____
- b) What colour is the most popular? _____
- c) Were there more yellow cars or blue cars? _____

Name: _____

Using Observations

If you notice a fire engine driving down your street, you could probably make several observations about it.

List these observations here.

Sample

If you wrote that you could HEAR the loud siren, or SEE the red fire engine, you have made observations.

But, if you said the fire engine is going to a fire, you have made an INFERENCE.

An inference is a possible explanation of an observation.

Next to each of the following statements, write if you think it is an **observation** or an **inference**.

It is 32 degrees Celsius outside today. I think this is an _____

It is cold today because it is winter. I think this is an _____

The bird had blue feathers in its tail. I think this is an _____

The cake smelled of cinnamon. I think this is an _____

Jane is wearing a purple swimming costume because she is going swimming.

I think this is an _____

The car stopped because it ran out of petrol.

I think this is an _____

