

Unit 1

The Nature of Science



What is science?

1 What senses do we have? Look and match.



- hearing taste smell touch sight

2 What do you use the different parts of your body for? Read and write.

- | | | | | |
|---|---------|-------------|---|-----------------|
| 1 | smell | <u>nose</u> | a | ears |
| 2 | taste | _____ | b | mouth |
| 3 | sight | _____ | c | nose |
| 4 | touch | _____ | d | eyes |
| 5 | hearing | _____ | e | hands |

3 Which senses do you use in each activity? Look and mark (✓).

	smell	sight	taste	hearing	touch
	✓				



4 How do our senses help us to find out about the world? Read and write the five senses.

Reading Tip

Read the text and underline the body parts. This will help you choose the correct senses.

Saturday, September 12

I am in my grandmother's garden. It is very pretty. My grandmother's (1) sight isn't very good, but she uses her other senses. There are a lot of big apple trees and she uses her hands for (2) _____. When she eats the apples from the trees, she uses her mouth for (3) _____. She uses her ears for (4) _____ the birds in the trees. There are flowers next to the trees. She uses her nose for (5) _____.



5 Look at 4. Read and match.

- | | |
|-----------|---------------|
| 1 hearing | a apple trees |
| 2 smell | b apples |
| 3 touch | c birds |
| 4 taste | d garden |
| 5 sight | e flowers |

6 How do you use your senses? Complete for you.

- 1 I use my ears for hearing. I hear an airplane.
- 2 _____ smell. _____
- 3 _____ touch. _____
- 4 _____ taste. _____
- 5 _____ sight. _____

Lesson 1 • What kinds of skills do scientists use?

1 What do we do in science? Look and write.

~~observe~~

predict

senses

results

experiment



observe

2 Mike has to do an experiment for homework. Read and write. Use the words from 1.



Hi Luke,

How are you? I have lots of homework this week 😞.

Our science teacher, Mr. Burton, wants us to carry out a(n)

(1) experiment at home.

Mr. Burton wants us to ask a question and then do an experiment to find out the answer. First, he wants us to (2) _____ the answer.

That's difficult! He says we can then compare our answer with the (3) _____ at the end.

He thinks the best way to (4) _____ is to use our (5) _____, like sight, smell, taste, touch, and hearing.

Help! What experiment can I do?

Write back soon!

Mike



- 3 Look at 2. Which are the simple present verbs? Underline.
- 4 Mike wrote the results of his experiment. Complete the sentences.

Grammar Tip
 We **have** five senses: smell, hearing, touch, sight, and taste.

Mike's Experiment

Question: Do the birds like Tree A or Tree B more?
 I predict that the birds like Tree A more.
 Birds in Tree A and Tree B between 3:00 P.M. and 4:00 P.M.:

	Tree A	Tree B
Monday	5	4
Tuesday	3	4
Wednesday	1	1
Thursday	2	2
Friday	6	3

- 1 It's Monday. Tree A has five birds and Tree B _____ four birds.
 - 2 It's Tuesday. Tree A _____ three birds and Tree B _____ four birds.
 - 3 It's Wednesday. Tree A and Tree B _____ one bird.
 - 4 It's Thursday. Tree A _____
and _____.
 - 5 It's Friday. _____
_____.
- 5 Mike predicted that the birds like Tree A more. Is he correct? Circle.
 Y / N

Lesson 2 • How do scientists find answers?

1 Simon investigates how seeds grow. Read and write.

height conclusion measurement hypothesis ~~investigate~~



Simon's Science Blog

Posted: September 5th

Today, I am doing an experiment. I want to (1) investigate if seeds need water to grow. First, I ask the question: Do seeds need water to grow? Then, before I do the experiment, I need to make a (2) _____ to answer the question. I predict that the seeds that are watered will grow.

Now, I need to plan a fair test: I put seeds in two pots. Each day, I water only one pot. Then I look each day to see which seeds grow into a plant. I want to record the (3) _____ of the plants, so I take a (4) _____ every day.

Then I do the same experiment again to see if the results are the same.



Posted: September 21st

I finish my repeat experiment today. I compare results and draw my (5) _____. Seeds need water to grow. My hypothesis is correct 😊.

2 Write the details of Simon's experiment. Use the underlined text in 1.

1 Ask the question: _____ Do seeds need water to grow? _____

2 Hypothesis: _____

3 Fair test: _____

4 Repeat the investigation: _____

5 Conclusion: _____

- 3 Look at 1 and find *First* and *Then*. Circle.
- 4 Simon is planning another experiment. Read and write the steps of the experiment.

Grammar Tip

First, they ask questions.
Then they investigate.

Hypothesis Conclusion ~~Question~~ Fair test Repeat

Question: Do plants need the sun to grow?
 _____: I predict that the plant in the sun will grow.
 _____: I put one plant in the sun and I put one plant in the dark. I measure the height of each plant each day.
 _____: I do the experiment again. I take measurements.
 _____: Plants need the sun to grow.

- 5 Write the experiment in Simon's blog.

Posted: September 25th

I want to investigate if plants need the sun to grow. First, I ask the question: _____? Then I need to make _____ to answer the question: _____. Now, I need to plan a _____. This is my test: _____. I take _____. I measure the _____ of the plants every day. Then I repeat the _____. I compare results and draw my _____.

Lesson 3 • How do scientists collect and share data?

1 Can you describe these rocks? Look, circle, and write.

throughcbsmoothsharpdijwrounedeopjaggedfnulargetsmalltall



rough



2 We use our senses to find out how the rocks are different. Look and circle.

1 The **basalt** / **pumice** is smooth.



Basalt

2 The **pumice** / **granite** is large.



Pumice

3 The **pumice** / **granite** is rounded.

4 The **basalt** / **granite** is rough.



Granite

3 Look at 1 and 2. Write about the rocks.

Scientists use different senses to collect (1) data about the rocks. They use their senses of sight and touch to observe and measure the rocks. The results are very different. (2) _____ is a smooth rock. (3) _____ is large and rough. (4) _____ is rough and rounded.

4 Look at the photos and the height of the trees. Complete the bar chart.



Fir = 80 m

Fir tree



Oak = 40 m

Oak tree

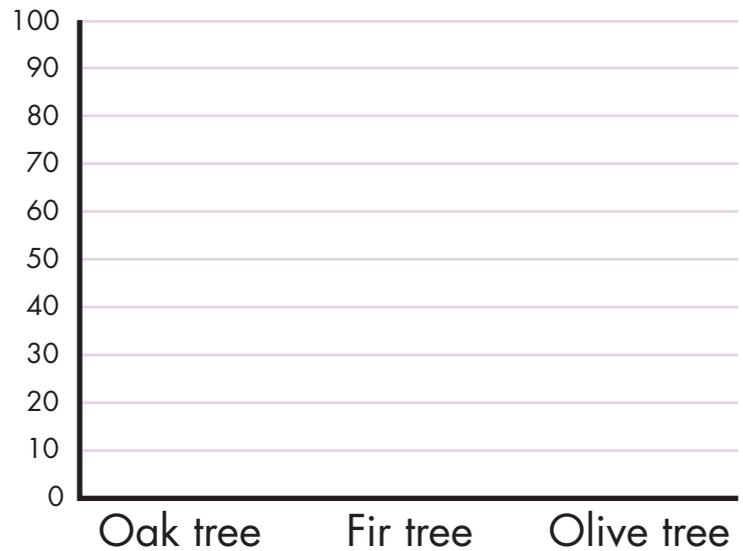


Olive = 7 m

Olive tree

Reading Tip

Tables, charts, and graphs help us understand a lot of information quickly. They can help us to compare things.



5 Look at 4. Complete the chart. Then write the answers.

	Oak Tree	Fir Tree	Olive Tree
Where?	England	North America	Mediterranean
Height?			
Leaves?	smooth	very sharp	sharp

- 1** It's from North America. _____
- 2** It's 40 meters high. _____
- 3** Its leaves are very sharp. _____

6 Look at 5. Which is your favorite tree? Write.

My favorite tree is a _____ tree. It's from _____.
 It's _____ high. Its leaves _____.