

Science F-2

Chapter 1 — Science as a human endeavour: observing, and using what we observe

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Observing the world: the senses, and the tools scientists observe with

This is read with the teacher. The teacher reads all the words. The child looks, says, points and does. The child does not need to read.

scientific knowledge is based on observations of the natural world using the senses, and scientific tools and instruments — VC2S2H01

Evidences: They make and compare observations about the world around them.

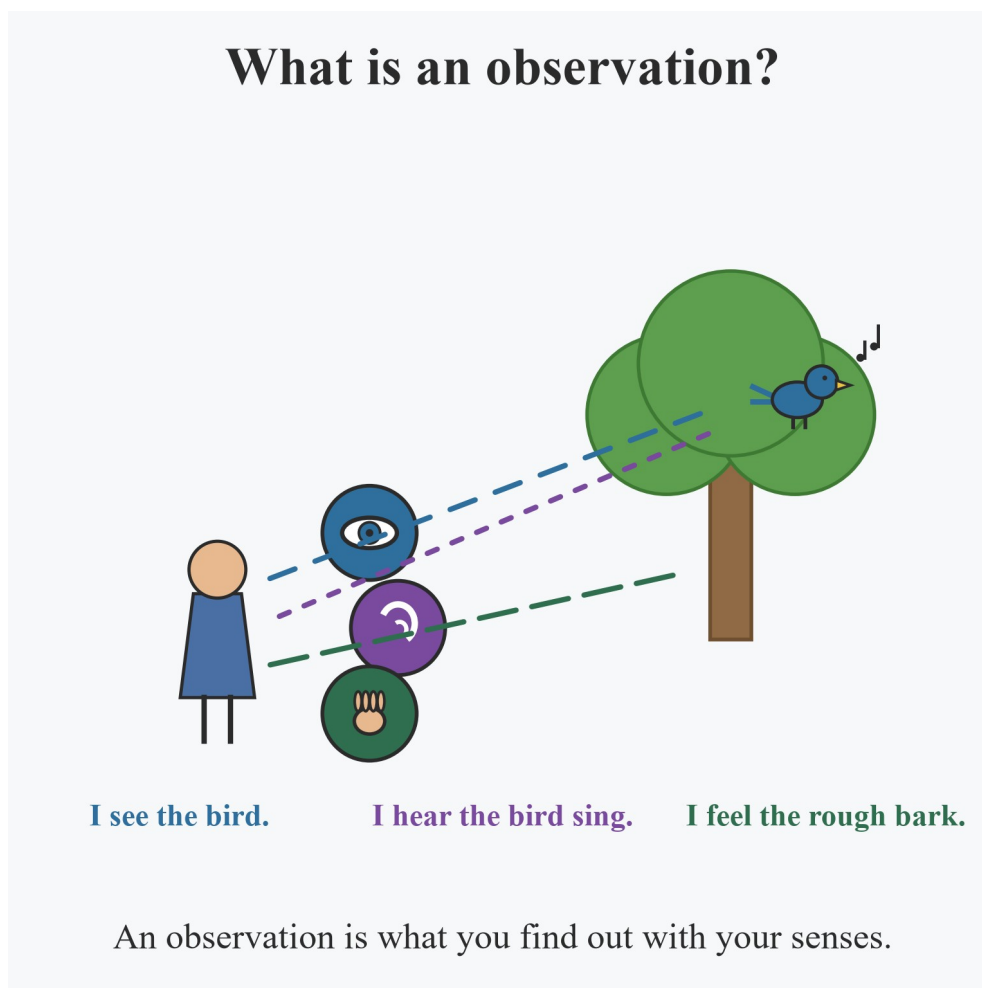
In this topic we will:

- say what an observation is, and the five senses we make observations with (E01)
- look at ways to record observations, like drawings and photos (E02)
- hear about people who do scientific work — a zoo keeper, a vet, a botanist and a park ranger — and ask questions about observations in their work (E03)
- notice the ways scientists record what they observe — drawings, collections, sound recordings and photos — and the questions they ask (E04)
- see how astronomers use patterns in the sky to say what they will see next (E05)

Theory

What is an observation?

An **observation** is what you find out with your senses. To **observe** means to look, listen and find out.



A child by a tree with a bird in it; sense lines run from the child to the bird and the trunk; the words "I see the bird.", "I hear the bird sing." and "I feel the rough bark."

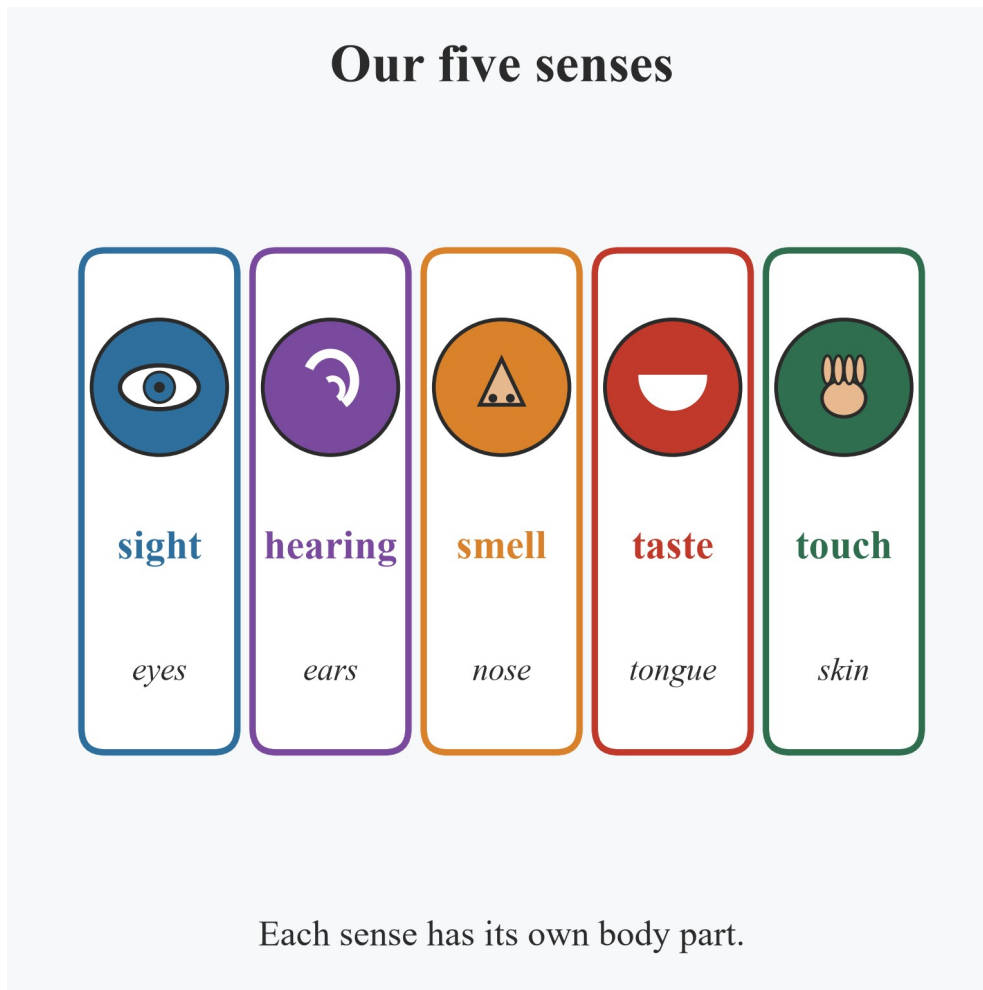
- I **see** the bird. That is an observation.
- I **hear** the bird sing. That is an observation.

- I **feel** the rough **bark**. The bark is the outside skin of a tree. That is an observation.

An observation is what we find out. *I like the bird* is not an observation. It is what we think or feel inside.

Our five senses

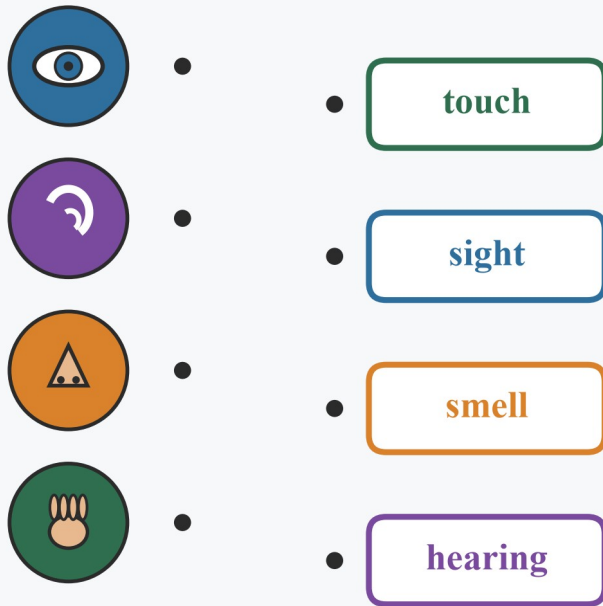
We have five senses. Each sense has its own body part.



Five cards: sight with eyes, hearing with ears, smell with nose, taste with tongue, touch with skin.

- **Sight** is the sense we use with our eyes.
- **Hearing** is the sense we use with our ears.
- **Smell** is the sense we use with our nose.
- **Taste** is the sense we use with our tongue.
- **Touch** is the sense we use with our skin. The **skin** is the outside part of the body we feel with.

Match each body part to its sense



Draw a line from each body part to its sense word.

A matching page: eye, ear, nose and hand pictures on the left; the sense words touch, sight, smell and hearing on the right.

Point to each body part. Say its sense.

The rule: we never taste

In science we observe with four senses: sight, hearing, smell and touch. We do not use taste.

The rule: we never taste the things we observe. We never put things in our mouth to find out about them. Some things can make us sick.

The rule: we never taste



berries



a drink



In science we observe with four senses. We never taste the things we observe.

A no sign over a jar of berries and a no sign over a drink; a no sign over a tongue.

Berries in the park: we look at them, we never taste them. A drink we find: we never taste it. Only the teacher says what is safe to taste, like food at lunch time. In science, we never taste.

Tools that help us observe

Our senses are good. Tools help our senses do more. A **tool** is a thing we use to help us do something.

Tools help us see more



far away



the magnifying glass

small things look big



binoculars

far things look near



a digital camera

keep what you see

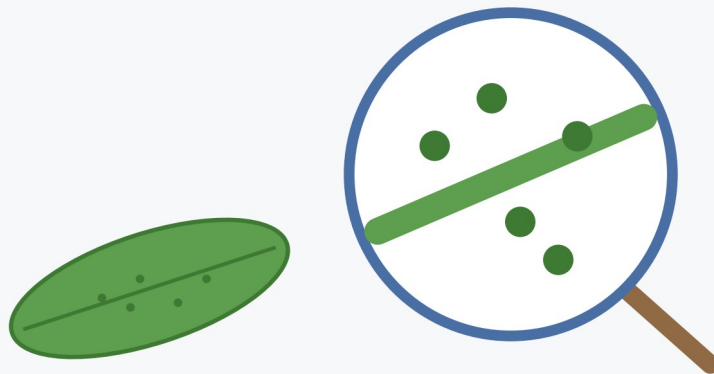
Three tools that help our eyes.

Three tools in a row: the magnifying glass (small things look big), binoculars (far things look near) and a digital camera (keep what you see).

The magnifying glass

A **magnifying glass** is a tool. It makes small things look big. The **lens** is the part we look through.

See more with a magnifying glass



a gum leaf

inside the lens: the leaf, up close

A magnifying glass is a tool. It makes small things look big.

A gum leaf with small dots on it; in the big lens view the dots and the leaf line look big.

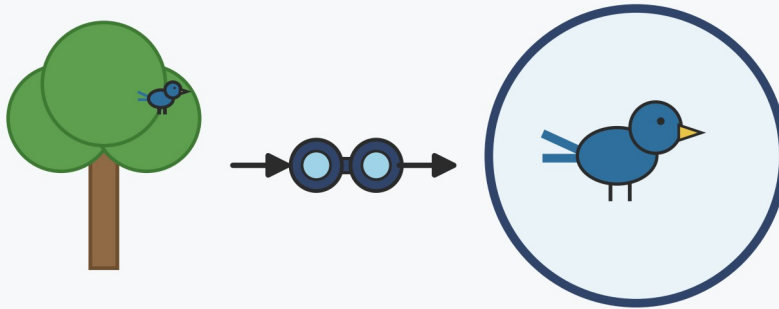
With our eyes alone, the gum leaf looks smooth. With the magnifying glass, we see small dots and lines. We observe more.

Never look at the Sun with a magnifying glass. Never look straight at the Sun.

Binoculars

Binoculars are a tool. They make far things look near. We hold them up to our eyes.

See far with binoculars



far away, the bird looks small

with binoculars, the bird looks near

Binoculars are a tool. They make far things look near.

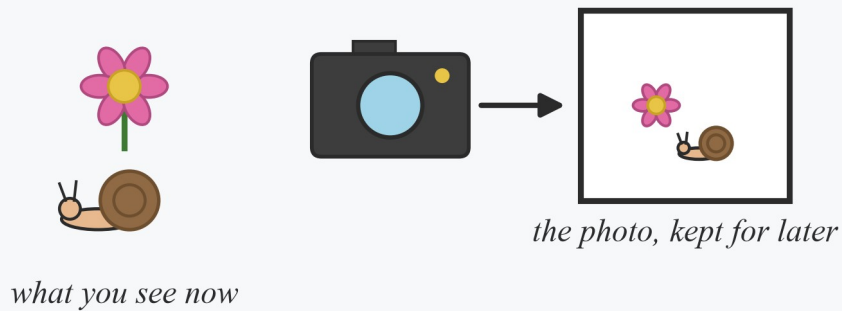
Left: a tree far away with a small bird in it. Right: a round view where the same bird looks big and near.

Far away, the bird looks small. With binoculars, the bird looks near. We see the bird well.

The digital camera

A **digital camera** is a tool. It takes a **photo**. A photo is a picture the camera keeps. We can look at the photo later, and share it.

Keep what you see with a digital camera



A digital camera takes a photo. You can look at it later, and share it.

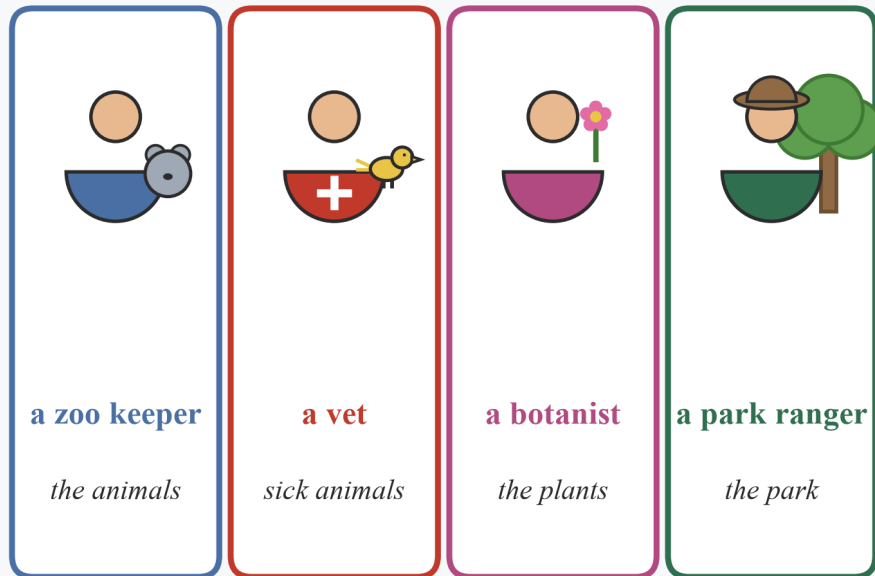
A flower and a snail now; a digital camera; then the photo of them, kept for later.

The snail can move away. The photo stays. We can look and look at the photo.

People who observe at work

Many people observe as part of their work. We can ask them questions about their work.

People who observe at work



Each of these people observes as part of their work.

Four cards: a zoo keeper (the animals), a vet (sick animals), a botanist (the plants) and a park ranger (the park).

A zoo keeper gives the animals care. Zoo keepers work outside in all weather. They observe the animals every day, to see the animals are well.

Source: Zoos Victoria, Become a Zoo Keeper, n.d. Retrieved 2026-08-20.

A vet is a doctor for animals. A vet observes sick and hurt animals, to help them get well. At Healesville Sanctuary, vets help sick and hurt wild animals.

Source: Zoos Victoria, Emergency wildlife help, n.d. Retrieved 2026-08-20.

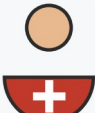
A botanist observes the plants. Botanists look at plants very well, and name the plants.

Source: Royal Botanic Gardens Victoria, Science, n.d. Retrieved 2026-08-20.

A park ranger observes the park. Rangers watch over the park and keep it safe.

Source: Parks Victoria, Meet our rangers, n.d. Retrieved 2026-08-20.

Match each person to what they observe

 a zoo keeper	•	•	the plants
 a vet	•	•	the park
 a botanist	•	•	the animals
 a park ranger	•	•	a sick bird

Draw a line from each person to what they observe.

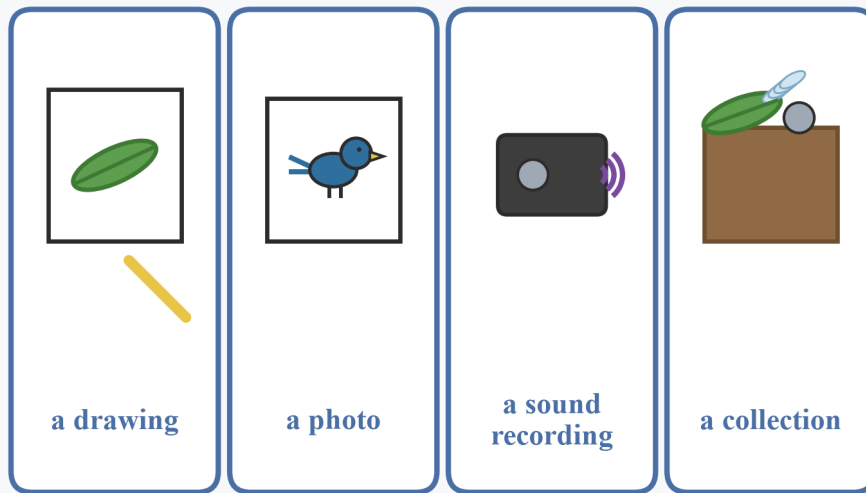
A matching page: a zoo keeper, a vet, a botanist and a park ranger on the left; the plants, the park, the animals and a sick bird on the right.

Point to each person. Say what they observe.

Ways to record an observation

To **record** means to put something down so we can look at it again. Scientists record what they observe.

Record what you observe



Four ways to record an observation, so we can look at it again.

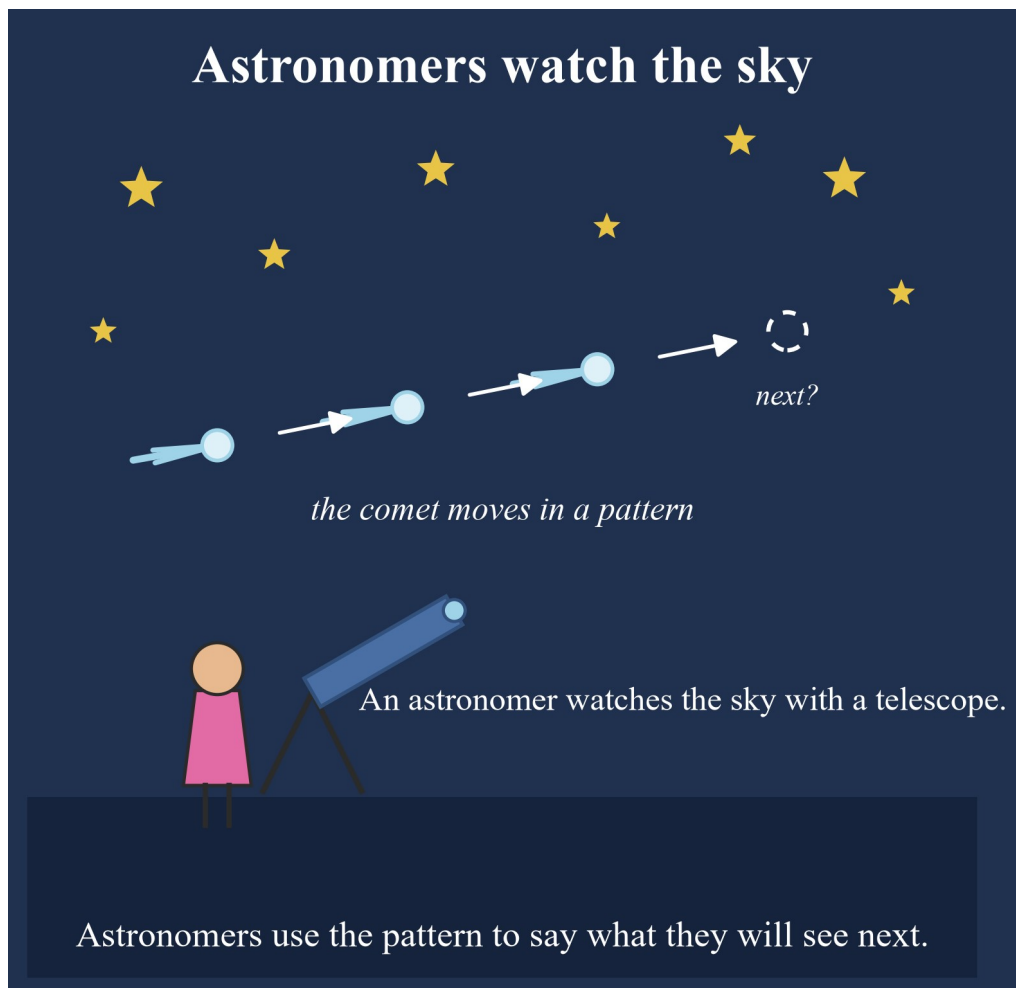
Four cards: a drawing of a leaf, a photo of a bird, a sound recording, and a collection box with a leaf, a stone and a feather.

- **A drawing.** We draw what we see. A drawing with a **label** is even better. A label is a word next to a part of the drawing.
- **A photo.** The camera keeps what we see.
- **A sound recording.** It keeps what we hear, like a bird song. We can listen to it again.
- **A collection.** A box can keep leaves and stones we find.

Scientists ask questions too. *Will I see the same if I look again tomorrow?* They observe, to find out.

Astronomers watch the sky

An **astronomer** is a scientist who watches the sky. Astronomers observe the stars, the Moon and comets. A **comet** is a bright thing that moves across the sky over many nights. A **telescope** is a big tool, like binoculars, for the sky. It helps astronomers see far things in the sky.



A night sky with stars; a comet shown at three places in a pattern, with an arrow to the next place; an astronomer at a telescope on the ground.

Astronomers see the comet move in a **pattern**. A pattern is the same order again and again. The pattern helps them say where the comet will be next. They use what they see to say what they will see next.

Make and compare observations

We make observations on a senses walk. A **senses walk** is a walk where we use our senses to find things out.

My senses walk

sense	draw what you observe	we used it
 see		☐
 hear		☐
 smell		☐
 touch		☐

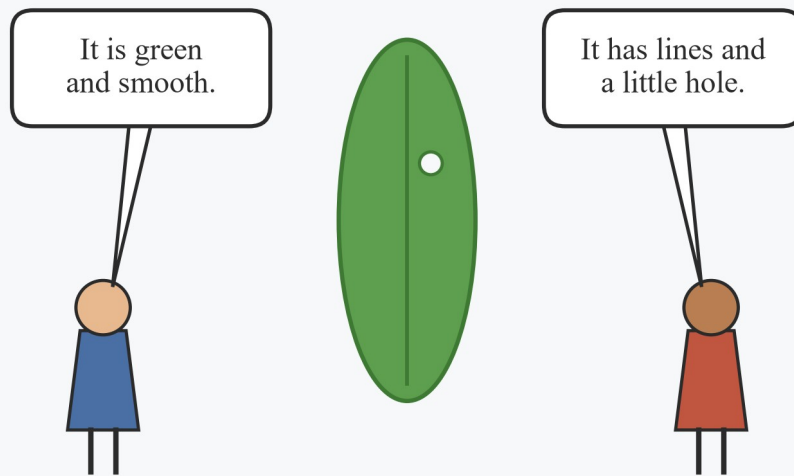
On the walk, tick each sense you use. Draw what you observe. We never taste.

A table with rows for see, hear, smell and touch; a big box in each row to draw what you observe; a tick box in a “we used it” column.

On the walk, tick each sense you use. Draw what you observe in the box. We never taste.

We can **compare** observations. To compare means to look at two things and say what is the same and what is not the same.

One leaf, two observations



Both children observed the same leaf. Each found out something new.

Two children with one gum leaf between them; one says “It is green and smooth.”, the other says “It has lines and a little hole.”

Two children observe the same gum leaf. One child sees green and smooth. The other child sees lines and a little hole. Both children observed well. When we share, we find out more.

Worked examples

Do these with the teacher. Use what you can see here.

Worked example 1 — observation, or not?

Sort these into two groups: observation, or not an observation.

The snail is small. · The bell is loud. · I like the snail. · I think the snail will hide.

Working

The snail is small. We find this out with our eyes.

The bell is loud. We find this out with our ears.

I like the snail. This is what we feel inside.

I think the snail will hide. We have not found this out yet.

Say why

An observation is what we find out with our senses.

Hearing is a sense.

We did not find it out with a sense. Not an observation.

Not an observation.

∴ The snail is small and The bell is loud are observations. The other two are not.

Worked example 2 — which sense?

We hear a bird sing. We smell a flower. We feel rough bark. Which sense do we use each time?

Working

A bird song is a sound. Sounds come to our ears.
A flower smell comes to our nose.
Rough is how a thing feels. We feel with our skin.

Say why

Hearing uses the ears.
Smell uses the nose.
Touch uses the skin.

∴ The bird: hearing. The flower: smell. The bark: touch.

Worked example 3 — which tool?

Match each job to a tool: the magnifying glass, binoculars, the digital camera.

Working

An ant on a leaf is small.
A bird is far away in a tree.
We want to show the flower to our family later.

Say why

The magnifying glass makes small things look big.
Binoculars make far things look near.
A photo keeps what we see, for later.

∴ The ant: the magnifying glass. The bird: binoculars. The flower: the digital camera.

Worked example 4 — match the person to the work

Match each person to what they observe.

Match each person to what they observe

a zoo keeper

a vet

a botanist

a park ranger

the plants

the park

the animals

a sick bird

Draw a line from each person to what they observe.

A matching page: a zoo keeper, a vet, a botanist and a park ranger on the left; the plants, the park, the animals and a sick bird on the right.

Working

A zoo keeper gives the animals care.
A vet is a doctor for animals.

Say why

The zoo keeper observes the animals.
The vet observes a sick bird.

A botanist observes the plants.

The botanist observes the plants.

A park ranger watches over the park.

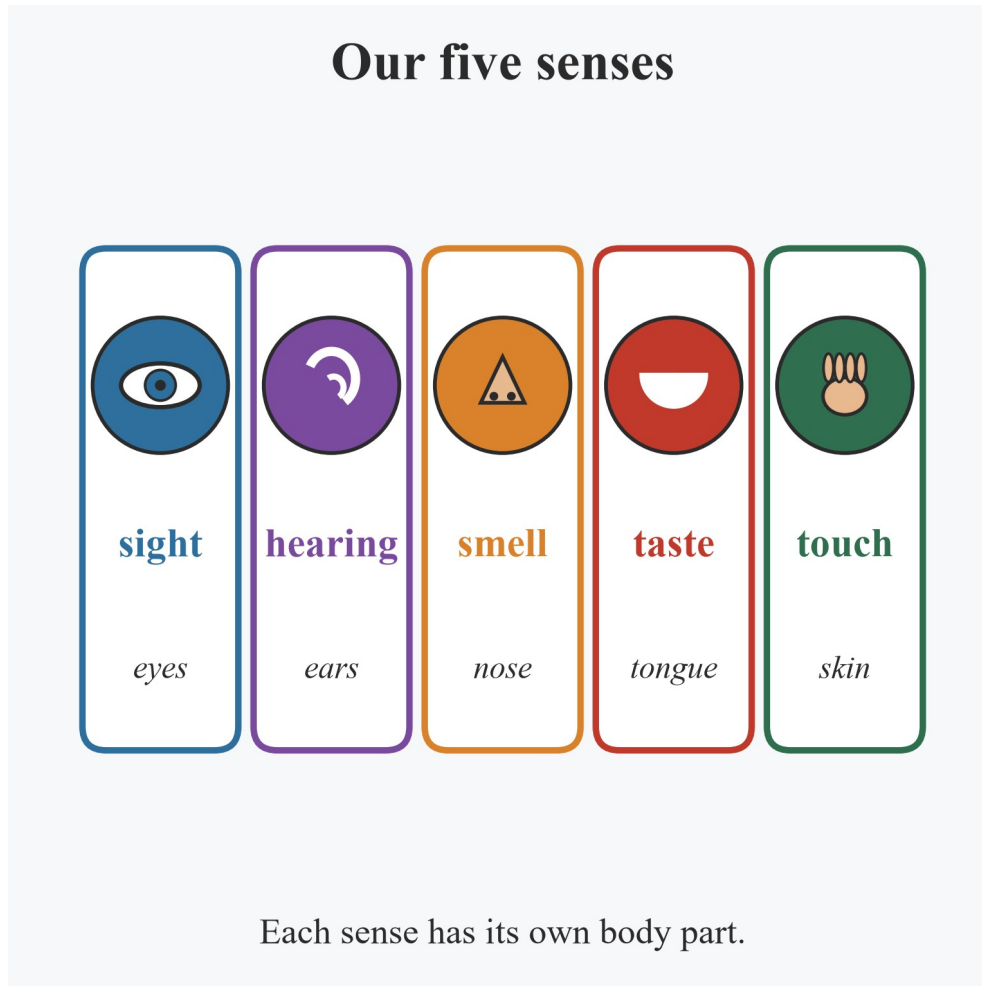
The ranger observes the park.

∴ Zoo keeper: the animals. Vet: a sick bird. Botanist: the plants. Park ranger: the park.

Practice questions

The teacher reads all the words. The child says or does the answer. The teacher puts the answer down.

Q1. (Foundation) Look at the five sense cards.

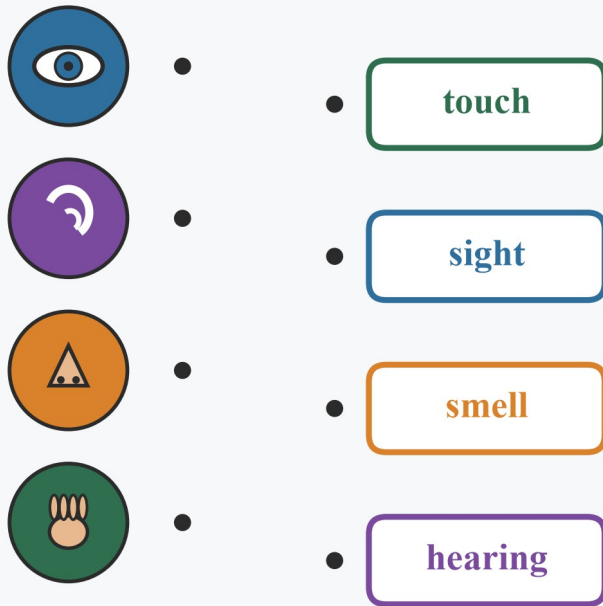


Five cards: sight with eyes, hearing with ears, smell with nose, taste with tongue, touch with skin.

- Point to the card for sight.
- Point to the card for touch.
- Say the sense we use with our ears.

Q2. (Foundation) Look at the matching page.

Match each body part to its sense



Draw a line from each body part to its sense word.

A matching page: eye, ear, nose and hand pictures on the left; the sense words touch, sight, smell and hearing on the right.

- Point to the eyes. Say the sense.
- Point to the nose. Say the sense.

Q3. (Foundation) We find berries in the park. What do we do? Circle one.

taste them · look at them

Q4. (Foundation) Look at the three tools.

Tools help us see more



far away



the magnifying glass

small things look big



binoculars

far things look near



a digital camera

keep what you see

Three tools that help our eyes.

Three tools in a row: the magnifying glass (small things look big), binoculars (far things look near) and a digital camera (keep what you see).

- Point to the tool that makes small things look big.
- Point to the tool that makes far things look near.
- Point to the tool that keeps what we see.

Q5. (Level 1) *The bell is loud.* Which sense is this? Circle one.

hearing · smell · sight

Q6. (Level 1) *The bark is rough.* Which sense is this? Circle one.

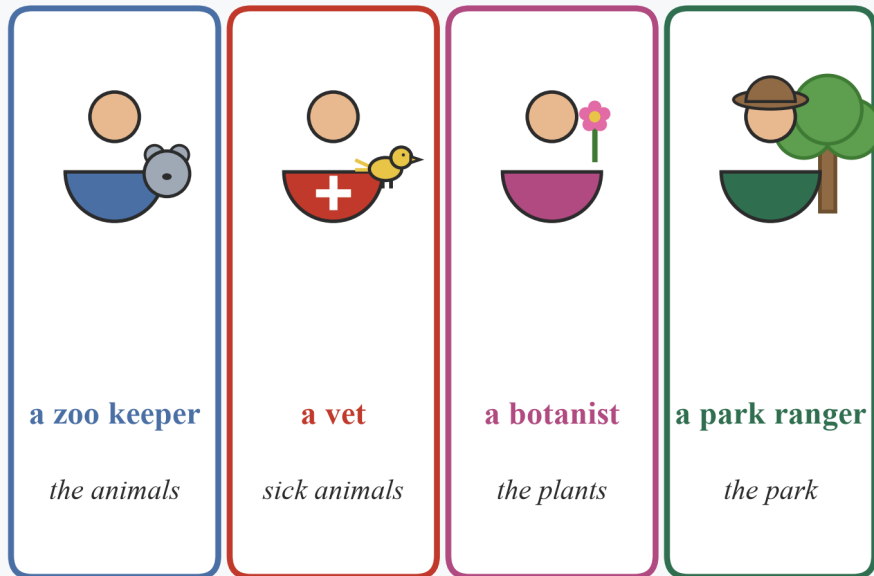
touch · taste · hearing

Q7. (Level 1) Match each thing to a tool. Say the tool.

an ant on a leaf · a bird far away · a photo for our family

Q8. (Level 1) Look at the people who observe at work.

People who observe at work

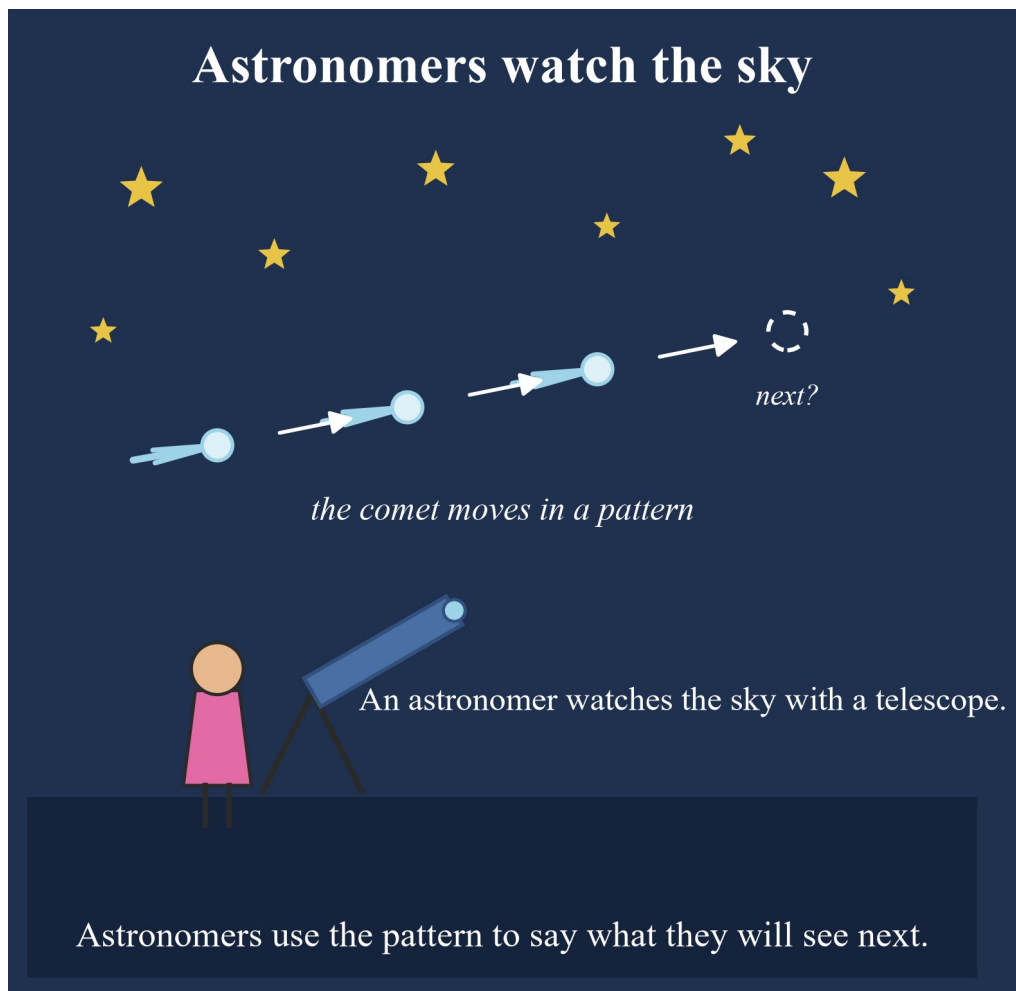


Each of these people observes as part of their work.

Four cards: a zoo keeper (the animals), a vet (sick animals), a botanist (the plants) and a park ranger (the park).

- Say the person who observes the plants.
- Say the person who observes sick animals.
- Say the person who observes the park.

Q9. (Level 2) Look at the astronomer.

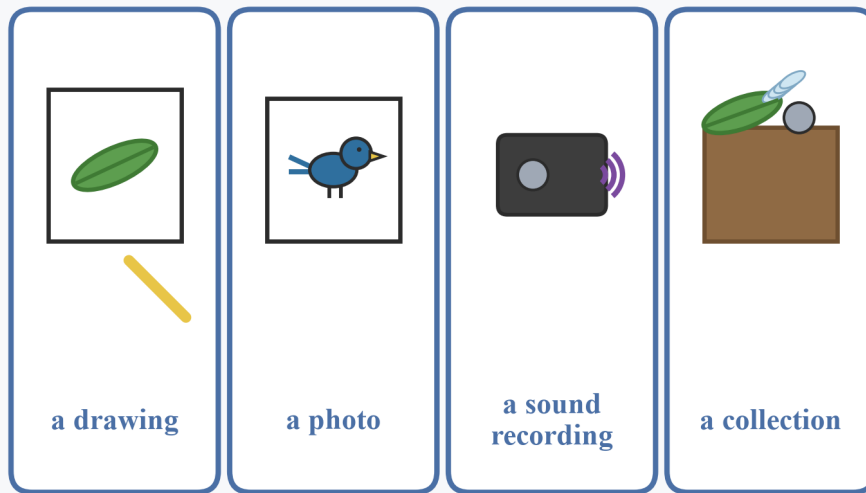


A night sky with stars; a comet shown at three places in a pattern, with an arrow to the next place; an astronomer at a telescope on the ground.

- Say the tool the astronomer uses.
- Say how the comet moves in the sky.
- Say what the pattern helps astronomers to do.

Q10. (Level 2) Look at the ways to record.

Record what you observe



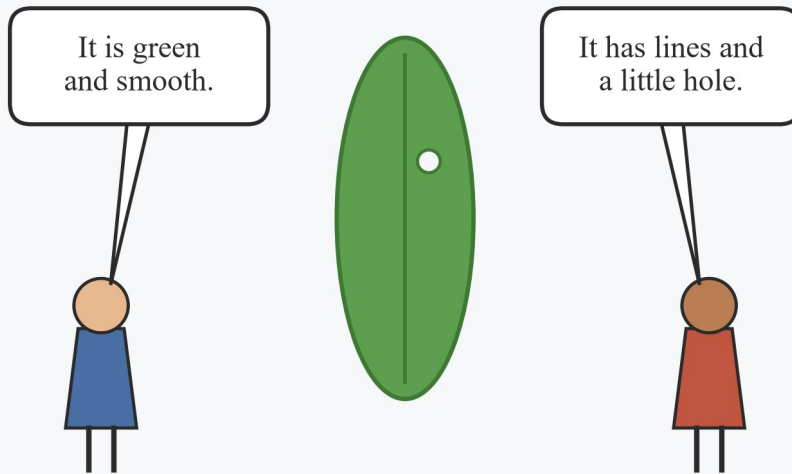
Four ways to record an observation, so we can look at it again.

Four cards: a drawing of a leaf, a photo of a bird, a sound recording, and a collection box with a leaf, a stone and a feather.

- Say the way that keeps what we hear.
- Say the way that uses a camera.
- Say one more way to record.

Q11. (Level 2) Two children observe the same gum leaf.

One leaf, two observations



Both children observed the same leaf. Each found out something new.

Two children with one gum leaf between them; one says “It is green and smooth.”, the other says “It has lines and a little hole.”

- Say what the first child sees.
- Say what the other child sees.
- Both children are right. Say why.

Q12. (Level 2) On a senses walk we hear a loud sound.

- Say the sense we use.
- Draw the thing that made the sound.
- Say one way to record the sound.

Answers

Q1. a. the sight card b. the touch card c. hearing.

Q2. a. sight b. smell.

Q3. look at them.

Q4. a. the magnifying glass b. binoculars c. the digital camera.

Q5. hearing.

Q6. touch.

Q7. an ant: the magnifying glass · a bird far away: binoculars · a photo: the digital camera.

Q8. a. a botanist b. a vet c. a park ranger.

Q9. a. a telescope b. in a pattern c. say what they will see next.

Q10. a. a sound recording b. a photo c. a drawing, or a collection.

Q11. a. green and smooth b. lines and a little hole c. they observed the same leaf; each found out something new.

Q12. a. hearing b. any drawing of a sound-making thing c. a sound recording.

Fully-worked solutions

Q1.

- a. Sight is the sense we use with our eyes. Point to the sight card.
- b. Touch is the sense we use with our skin. Point to the touch card.
- c. Our ears are for hearing.

∴ a. sight b. touch c. hearing.

Q2.

- a. The eyes are for sight.
- b. The nose is for smell.

∴ a. sight b. smell.

Q3.

The rule is: we never taste the things we observe. Berries in the park are not for tasting. We look at them.

∴ Circle *look at them*.

Q4.

- a. The magnifying glass makes small things look big.
- b. Binoculars make far things look near.
- c. The digital camera keeps what we see.

∴ a. the magnifying glass b. binoculars c. the digital camera.

Q5.

Loud is how a sound is. Sounds come to our ears. Hearing uses the ears.

∴ Circle hearing.

Q6.

Rough is how a thing feels. We feel with our skin. Touch uses the skin.

∴ Circle touch.

Q7.

The ant is small, so the magnifying glass. The bird is far away, so binoculars. A photo is what a digital camera makes.

∴ Ant: the magnifying glass. Bird: binoculars. Photo: the digital camera.

Q8.

- a. A botanist observes the plants.
- b. A vet observes sick animals.
- c. A park ranger observes the park.

∴ a. a botanist b. a vet c. a park ranger.

Q9.

- a. The astronomer uses a telescope.
- b. The comet moves in a pattern.
- c. The pattern helps astronomers say what they will see next.

∴ a. a telescope b. in a pattern c. say what they will see next.

Q10.

- a. A sound recording keeps what we hear.
- b. A photo uses a camera.
- c. A drawing and a collection also record what we observe.

∴ a. a sound recording b. a photo c. a drawing or a collection.

Q11.

- a. The first child sees green and smooth.
- b. The other child sees lines and a little hole.
- c. Both children observed the same leaf well. Each found out something new. When we share, we find out more.

∴ Both are right: one leaf, two observations.

Q12.

- a. Sounds come to our ears, so we use hearing.
- b. Draw the thing that made the sound, like a bell or a bird.
- c. A sound recording keeps what we hear.

∴ a. hearing b. any sound-making thing c. a sound recording.

Science in everyday life: asking questions, predicting from patterns

This is read with the teacher. The teacher reads all the words. The child looks, says, points and does. The child does not need to read.

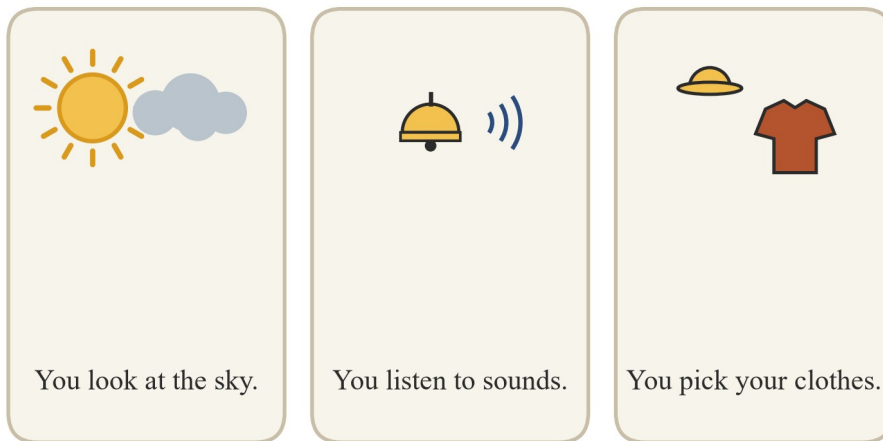
science is used by people in their daily lives, including asking questions and using patterns from observations of the world around them to make scientific predictions — VC2S2H02

Theory

Science in your day

Every day you look, listen and pick. That is science at work.

Science is at work in your day



You use what you see and hear every day.

Three cards: a sun and cloud sky, a ringing bell, and a hat and a top.

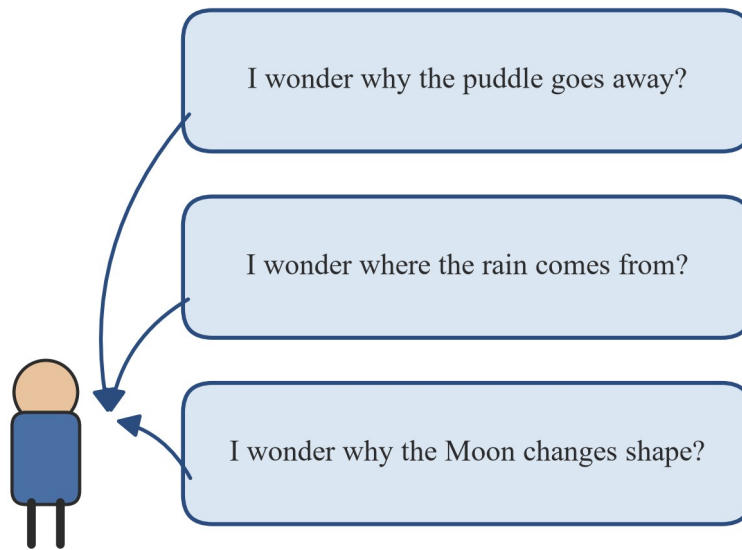
- You **look** at the sky. Is it sunny? Is it cloudy? Will it rain?
- You **listen** to sounds. A bell can tell you the door is opening.
- You **pick** your clothes. Hot day? Cold day?

Say one thing you looked at today. Say one thing you heard today.

We ask questions

People who do science ask questions. You ask them too.

We ask questions about the world



A question is the start of science.

A child asking three wonder questions about a puddle, the rain and the Moon.

- *I wonder why the puddle goes away?*
- *I wonder where the rain comes from?*
- *I wonder why the Moon changes shape?*

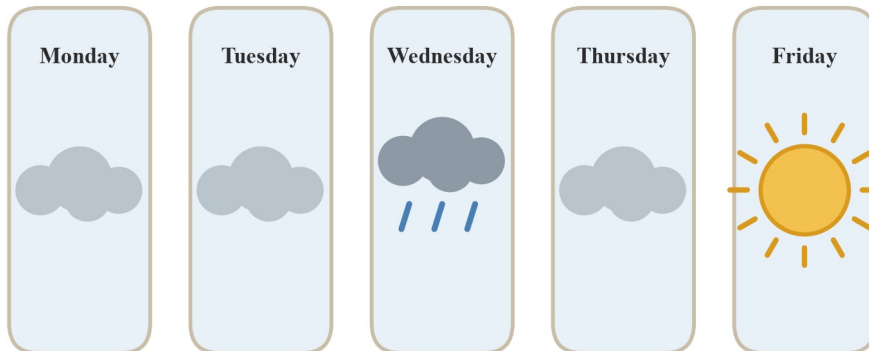
A question is the start of science.

Say one question you have about the sky, the weather or sounds.

Patterns: the same thing, again and again

A **pattern** is when the same thing happens again and again. When you see a pattern, you can say what might happen next. That is a **prediction**. A prediction is a guess about what will happen, made from what you have seen before.

One week of mornings



What do you notice?

The sky was cloudy on most days. That is a pattern.

Five day cards from Monday to Friday showing each morning's sky: cloud, cloud, rain, cloud, sun.

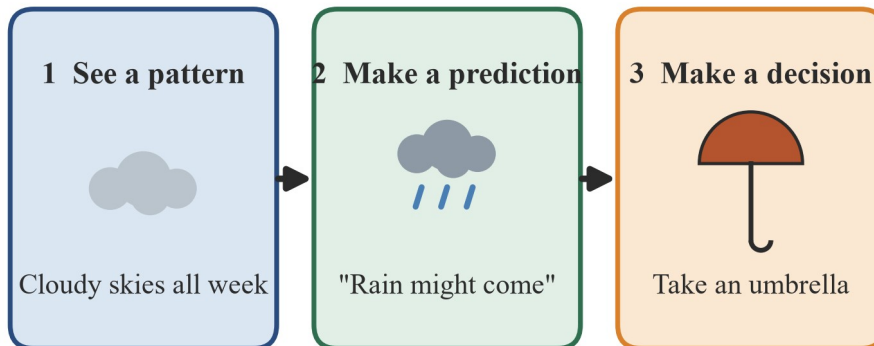
Look at one week of mornings. The sky was cloudy on most days. That is a pattern.

Say the pattern you see in the picture.

Pattern, then prediction, then decision

People use patterns every day. They see a pattern, make a prediction, and then choose what to do.

Pattern → prediction → decision



People do this every day. That is science at work.

See a pattern, then make a prediction, then make a decision: take an umbrella.

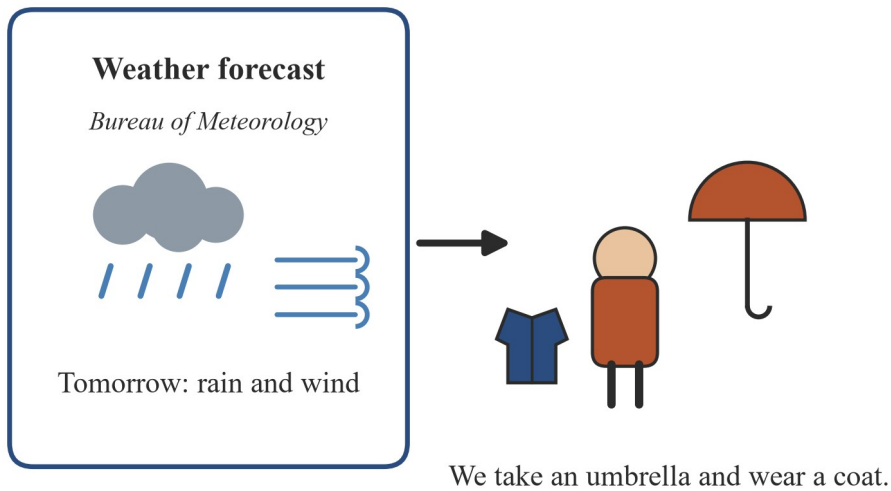
- **1 See a pattern.** The sky was cloudy on most days.
- **2 Make a prediction.** Rain might come today.
- **3 Make a decision.** Take an umbrella.

Say the three moves in order: pattern, prediction, decision.

The weather forecast

A **forecast** is a prediction about the weather. In Australia, the Bureau of Meteorology gives people the weather forecast.

The weather forecast: a prediction about tomorrow



People hear the forecast and decide what to do.

A weather forecast card saying rain and wind tomorrow, and a child with a coat and an umbrella.

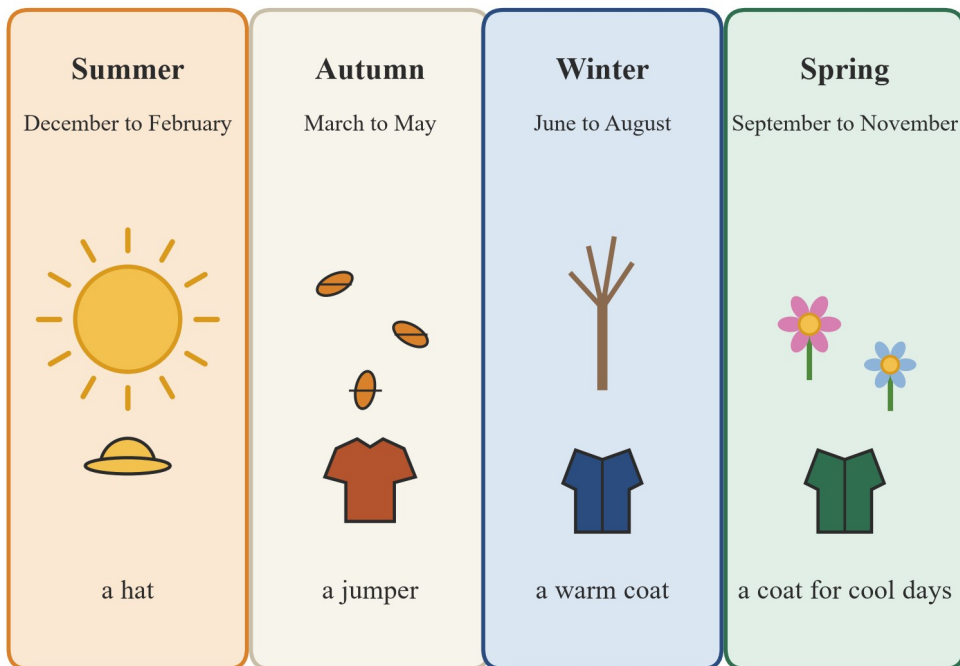
The forecast card in the picture is not a real card. It says rain and wind are coming. So people take an umbrella and wear a coat.

People hear the forecast and choose what to do. That is science in everyday life.

Clothes for the seasons

The weather has a pattern in a year. That pattern is the seasons. In Victoria, summer is December to February, autumn is March to May, winter is June to August, and spring is September to November.

Clothes for the seasons in Victoria



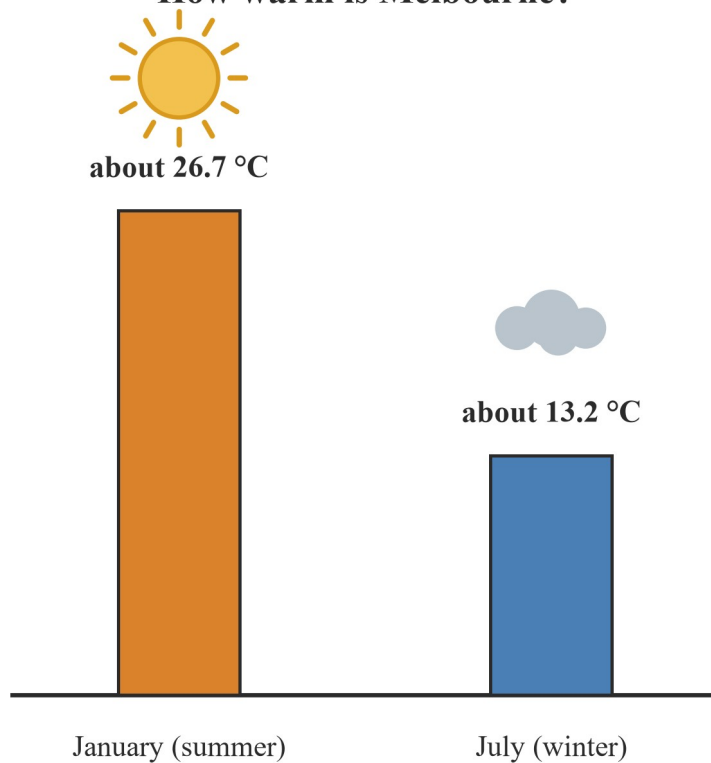
The pattern of the seasons helps you choose what to wear.

Clothes for the four seasons in Victoria: a hat, a jumper, a warm coat, and a coat for cool days.

- **Summer** is hot. A hat is good on hot days.
- **Autumn** gets cool. A jumper is good.
- **Winter** is cold. A warm coat is good.
- **Spring** has cool days. A coat is good for cool days.

Melbourne follows the same pattern every year. Most January days get to about 26.7 °C. Most July days get to about 13.2 °C.

How warm is Melbourne?



It is like this every year. That is a pattern.

How warm Melbourne gets: about 26.7 °C in January and about 13.2 °C in July, the same every year.

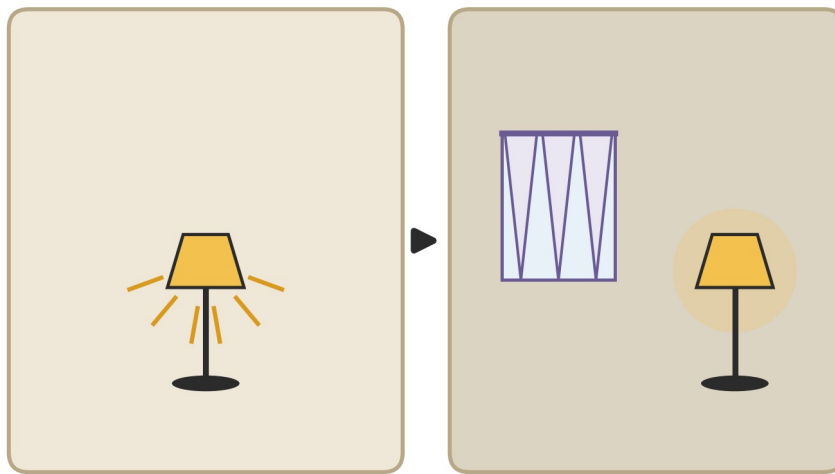
It is like this every year. That is a pattern. The pattern helps you predict what to wear.

Source: Bureau of Meteorology, Climate statistics for Australian locations — Melbourne Airport (086282), 2026.
Retrieved 2026-08-20.

People manage light at home

People choose how much light there is at home.

People manage light at home



A bright light

A low, soft light

Turn the light down low at night so others can sleep.

Two rooms: one with a bright light, one with a low soft light and a covered window.

- A bright light is good for reading and play.
- At night, turn the light down low. A low, soft light helps others sleep.
- A cover over a window keeps out bright light.

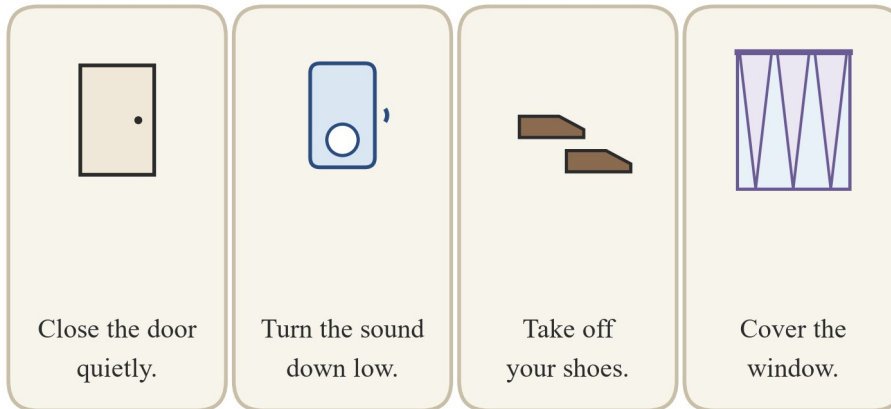
The Sun is very bright. Never look straight at the Sun.

Say one time you use a bright light. Say one time you want a low light.

People manage sound at home

People choose how much sound there is at home.

People manage sound at home



These choices help everyone at home.

Four cards: close the door quietly, turn the sound down low, take off your shoes, cover the window.

- Close the door quietly so others can sleep.
- Turn the sound down low when others are reading.
- Take off your shoes so the floor is not loud.
- Cover the window to keep out loud street sounds.

These choices help everyone at home.

Say one thing you do at home to keep sound low.

Sounds tell you things

A sound can tell you what is happening, even before you look. You hear it, predict what it means, and choose what to do.

Sounds tell you things



You hear a sound, predict what it means, and decide what to do.

Three cards: a doorbell means someone is at the door; a smoke alarm means go outside and tell an adult; a phone means someone wants to talk.

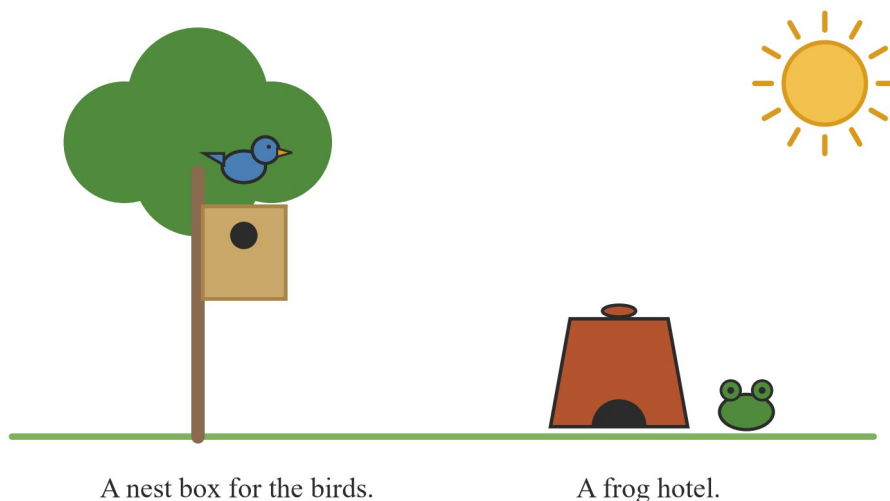
- The **doorbell** rings → someone is at the door.
- The **smoke alarm** beeps → go outside. Tell an adult.
- The **phone** rings → someone wants to talk.

Say what you do when you hear a smoke alarm.

Caring for the animals near home

People watch the animals near home. They see patterns there too. The same birds come back to the same tree each spring. So people predict the birds will come again. They put up a nest box, ready for the birds.

People care for animals near home



The same birds come back each spring. Watching helps us predict what animals will need.

A tree with a nest box and a bird, and a frog hotel with a frog on the grass.

- A **nest box** gives birds a safe place to live.
- A **frog hotel** is a cool, safe place for frogs and insects to hide.
- People keep the park clean and safe, so animals have a good home.

Watching animals helps people predict what the animals will need.

Say one animal you have seen near your home. Say what it needs.

People who work with materials

Some people learn what materials do, and then make things with them. **Materials** are what things are made of, like wood and wool.

People who work with materials



They watch, learn and predict what the material will do.

Three people who work with materials: a woodworker with wood, a product designer with a plan, and a fibre artist with wool.

- A **woodworker** makes things from wood. Wood is hard and smooth.
- A **product designer** plans new things, like chairs and toys.
- A **fibre artist** works with fibre. **Fibre** is what we make clothes and rope from. **Wool** is a fibre. Wool is the soft hair of sheep. Wool is soft and bendy.
- A **sculptor** makes things by shaping wood.

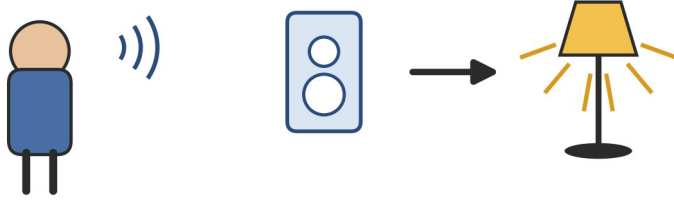
They watch, learn and predict what the material will do.

Say which job you would like to try. Say why.

Tools that listen to your voice

Some tools and toys work when they hear you. You say a word, and the tool listens. It learns the pattern of your voice. Your voice is not the same as any other. So the tool knows it is you.

Tools that listen to your voice



You say a word.

The light comes on.

Some tools and toys work when they hear you.

A child says a word, a tool listens, and a light comes on.

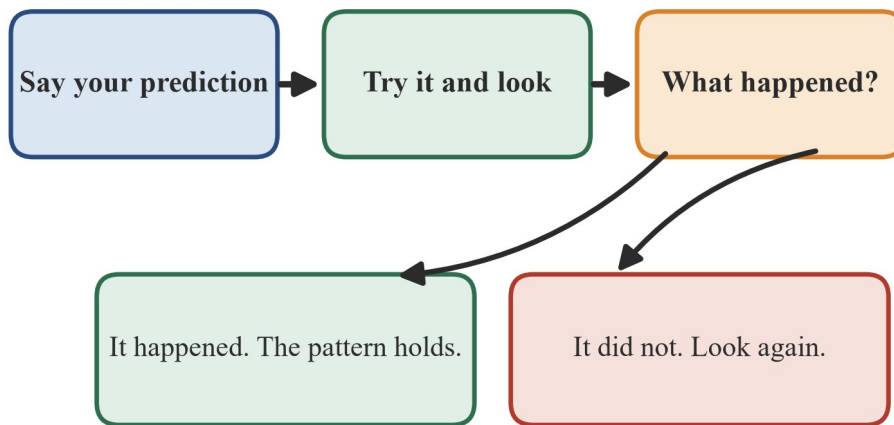
- You say a word.
- The tool hears the pattern of your voice.
- The light comes on.

Say if you have a tool at home that listens to your voice.

Predict, then check

When you make a prediction, check it. Try it and look.

Predict, then check



Both answers help you learn.

Predict, then check: if it happened, the pattern holds; if it did not, look again.

- If it happened, the pattern holds. Your prediction was right.
- If it did not happen, look again. Both answers help you learn.

Say why a wrong prediction helps you.

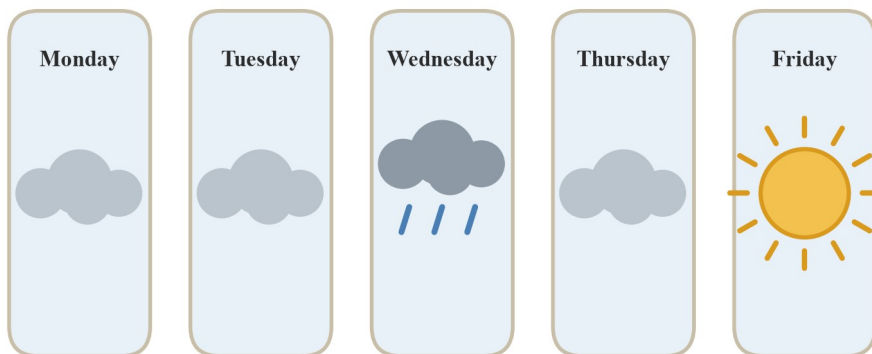
Worked examples

Do these with the teacher. Use what you can see here.

Worked example 1 — from a pattern to a prediction

Look at the week of mornings.

One week of mornings



What do you notice?

The sky was cloudy on most days. That is a pattern.

Five day cards from Monday to Friday showing each morning's sky: cloud, cloud, rain, cloud, sun.

Will you need an umbrella the next day?

Working

The sky was cloudy on most days.

Predict: the next day will be cloudy.

Cloudy days can bring rain. Take an umbrella.

Say why

That is a pattern.

A prediction uses the pattern.

The decision follows the prediction.

∴ The pattern helps us predict a cloudy day, so we take an umbrella.

Worked example 2 — use the forecast

The forecast says rain and wind tomorrow. What do we do?

Working

The forecast is a prediction from people who watch the weather.

Rain is coming.

Take an umbrella and wear a coat.

Say why

A forecast uses patterns too.

The forecast says so.

They keep us dry and warm.

∴ We take an umbrella and wear a coat.

Worked example 3 — clothes for the season

It is July in Victoria. What do you wear to go out?

Working

Say why

July is in winter here.

In Victoria, winter is June to August.

Winter days are cold. Most July days get to about 13.2 °C.

The pattern of the seasons.

Wear a warm coat, and a jumper under it.

They keep you warm.

∴ In a Victorian winter, wear warm clothes like a coat and a jumper.

Worked example 4 — a sound tells you

You are inside. You hear the smoke alarm beep. What do you do?

Working

Say why

The smoke alarm beeps.

That sound tells you something.

It means: go outside.

The alarm always means that.

Go outside. Tell an adult.

That is the safe choice.

∴ When the smoke alarm beeps, go outside and tell an adult.

Practice questions

The teacher reads all the words. The child says or does the answer. The teacher puts the answer down.

Q1. (Foundation) Look at the three cards.

Science is at work in your day

		
You look at the sky.	You listen to sounds.	You pick your clothes.

You use what you see and hear every day.

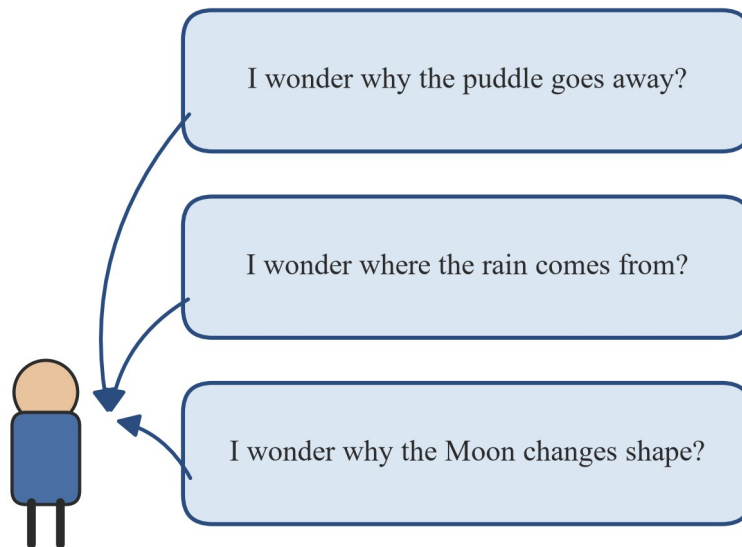
Three cards: a sun and cloud sky, a ringing bell, and a hat and a top.

- Point to the card about looking.

- b. Point to the card about listening.
- c. Point to the card about clothes.

Q2. (Foundation) Look at the child and the questions.

We ask questions about the world



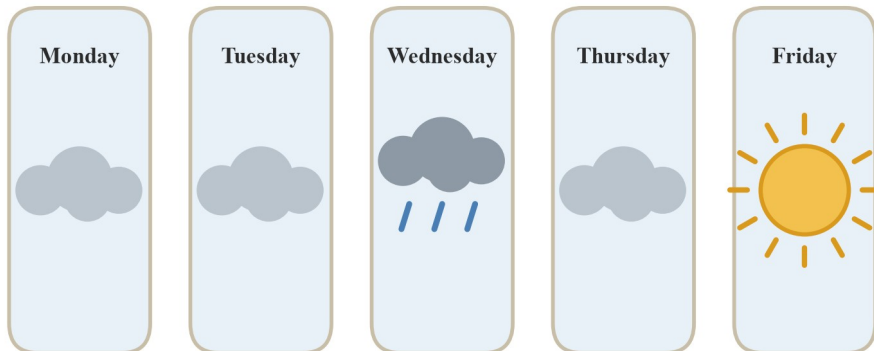
A question is the start of science.

A child asking three wonder questions about a puddle, the rain and the Moon.

- a. Say one question from the picture.
- b. Say one question of your own about the sky, the weather or sounds.

Q3. (Foundation) Look at the week of mornings.

One week of mornings



What do you notice?

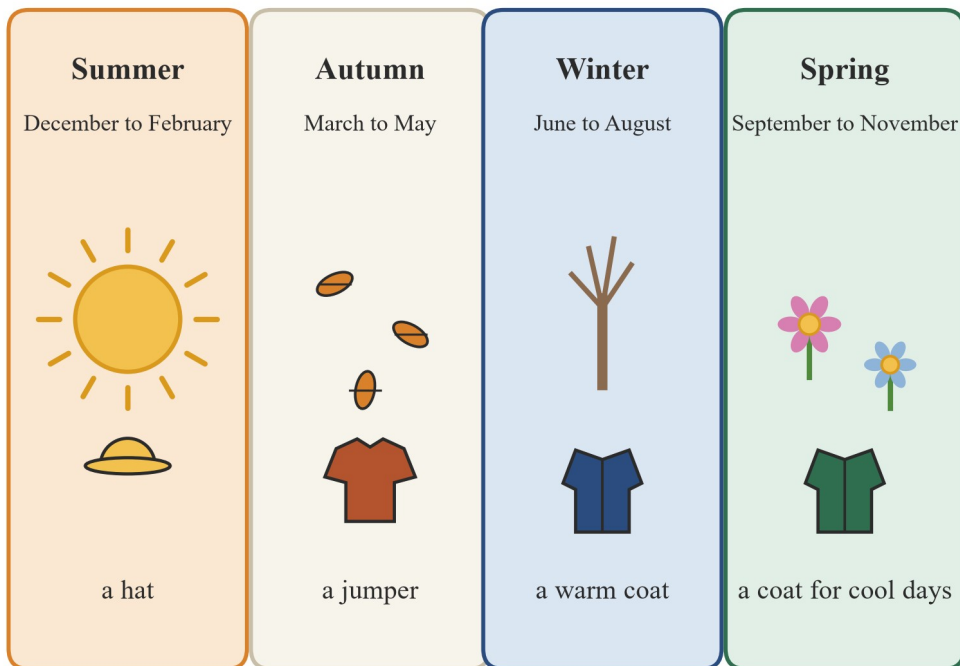
The sky was cloudy on most days. That is a pattern.

Five day cards from Monday to Friday showing each morning's sky: cloud, cloud, rain, cloud, sun.

- Point to the day with rain.
- Point to the day with sun.
- Say the pattern.

Q4. (Foundation) Look at the seasons picture.

Clothes for the seasons in Victoria



The pattern of the seasons helps you choose what to wear.

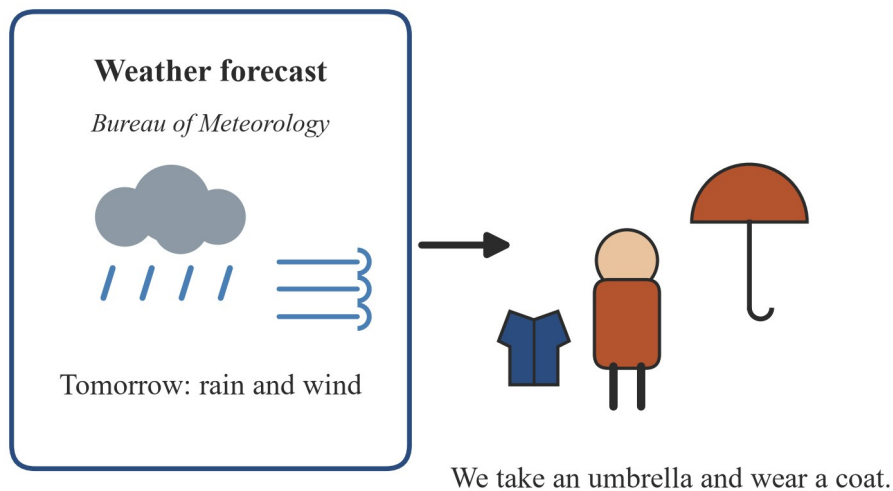
Clothes for the four seasons in Victoria: a hat, a jumper, a warm coat, and a coat for cool days.

- Point to the winter clothes.
- Say what you wear in winter.

Q5. (Level 1) Here are the three moves, mixed up: *take an umbrella, see a pattern, make a prediction*. Say which comes first, which comes next, and which comes last.

Q6. (Level 1) The forecast says rain tomorrow.

The weather forecast: a prediction about tomorrow



People hear the forecast and decide what to do.

A weather forecast card saying rain and wind tomorrow, and a child with a coat and an umbrella.

- a. Say what you take.
- b. Say why.

Q7. (Level 1) It is night. Your family is sleeping. What do you do with the light? Say why.

Q8. (Level 1) Match each sound to what it tells you.

Sounds tell you things

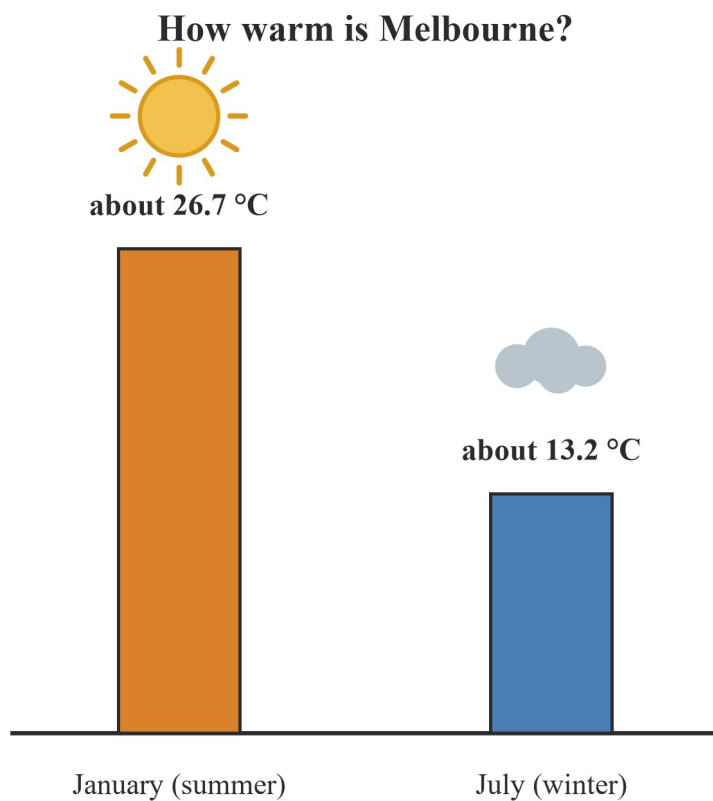
The doorbell rings.  → Someone is at the door.	The smoke alarm beeps.  → Go outside. Tell an adult.	The phone rings.  → Someone wants to talk.
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You hear a sound, predict what it means, and decide what to do.

Three cards: a doorbell means someone is at the door; a smoke alarm means go outside and tell an adult; a phone means someone wants to talk.

- a. The doorbell rings → ____
- b. The smoke alarm beeps → ____
- c. The phone rings → ____

Q9. (Level 2) Look at how warm Melbourne gets.



It is like this every year. That is a pattern.

How warm Melbourne gets: about 26.7 °C in January and about 13.2 °C in July, the same every year.

- a. Point to January. Say how warm it gets.
- b. Point to July. Say how warm it gets.
- c. Say why January is the warm one in Victoria.

Q10. (Level 2) You hear the doorbell.

- a. Say your prediction.
- b. Say your decision.

Q11. (Level 2) Look at the people who work with materials.

People who work with materials



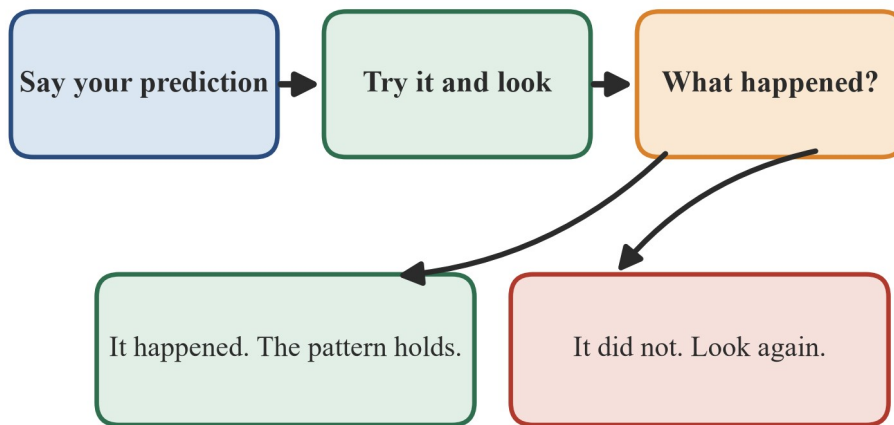
They watch, learn and predict what the material will do.

Three people who work with materials: a woodworker with wood, a product designer with a plan, and a fibre artist with wool.

- Who works with wool?
- Say two words about wool from the card.
- Say what fibre is.

Q12. (Level 2) You predict rain, because the week was cloudy. It does not rain.

Predict, then check



Both answers help you learn.

Predict, then check: if it happened, the pattern holds; if it did not, look again.

- Was your prediction right?
- What do you do next?

Answers

Q1. a. the first card b. the second card c. the third card.

Q2. a. any of the three, e.g. *I wonder where the rain comes from?* b. any true question.

Q3. a. Wednesday b. Friday c. The sky was cloudy on most days.

Q4. a. the warm coat b. e.g. *a warm coat*.

Q5. First: see a pattern. Next: make a prediction. Last: take an umbrella.

Q6. a. an umbrella and a coat b. Rain is coming; they keep us dry and warm.

Q7. Turn the light down low, so others can sleep.

Q8. a. someone is at the door b. go outside and tell an adult c. someone wants to talk.

Q9. a. about 26.7 °C b. about 13.2 °C c. January is in summer in Victoria.

Q10. a. Someone is at the door. b. Go and open the door.

Q11. a. the fibre artist b. soft and bendy c. what we make clothes and rope from.

Q12. a. no b. Look again; the pattern may still help next time.

Fully-worked solutions

Q1.

- a. The first card shows the sky. Looking at the sky is looking.
- b. The second card shows a bell. A bell is a sound.
- c. The third card shows a hat and a top. Those are clothes.

∴ Looking: card 1. Listening: card 2. Clothes: card 3.

Q2.

- a. The picture has three questions. Pick one and say it.
- b. A question starts with *I wonder*, *why*, *where* or *what*. Say one of your own.

∴ Any true question is right. Questions are the start of science.

Q3.

- a. Rain is on Wednesday. Point to it.
- b. Sun is on Friday. Point to it.
- c. Cloud on Monday, Tuesday, Thursday; rain on Wednesday. Most days were cloudy.

∴ The pattern: the sky was cloudy on most days.

Q4.

- a. Winter is the third card. The clothes on it are a warm coat.
- b. In winter you wear warm clothes.

∴ Winter clothes: a warm coat; you wear it to keep warm.

Q5.

The three moves go in order: first you see a pattern, then you make a prediction from it, then you choose what to do.

∴ First: see a pattern. Next: make a prediction. Last: take an umbrella.

Q6.

- a. The forecast says rain. An umbrella keeps rain off you. A coat keeps you dry and warm.
- b. The forecast is a prediction. We act on it.

∴ Take an umbrella and a coat, because the forecast says rain.

Q7.

A bright light can stop others from sleeping. At night, turn it down low.

∴ Turn the light down low, so others can sleep.

Q8.

- a. A doorbell rings when someone is at the door.
- b. A smoke alarm beeps to say: go outside.
- c. A phone rings when someone wants to talk.

∴ Doorbell → someone is at the door. Smoke alarm → go outside and tell an adult. Phone → someone wants to talk.

Q9.

- a. January is the tall one: about 26.7 °C.
- b. July is the short one: about 13.2 °C.
- c. In Victoria, January is in summer. Summer is the hot part of the year.

∴ January gets to about 26.7 °C and July to about 13.2 °C, because January is summer in Victoria.

Q10.

- a. A doorbell rings when someone is at the door. So predict: someone is at the door.
- b. Then decide: go and open the door.

∴ Prediction: someone is at the door. Decision: go and open the door.

Q11.

- a. The fibre artist works with wool.
- b. The card says wool is soft and bendy.
- c. Fibre is what we make clothes and rope from.

∴ The fibre artist; soft and bendy; fibre is what we make clothes and rope from.

Q12.

- a. Your prediction was rain. It did not rain. So the prediction was wrong.
- b. Look again. Check the pattern. A wrong prediction still helps you learn.

∴ The prediction was wrong; look again, because both answers help you learn.