

48 Things that are always true

English uses the zero conditional to talk about actions that always have the same results. This is useful for talking about scientific facts.

 **New language** Zero conditional

 **Aa Vocabulary** Scientific facts

 **New skill** Talking about general truths

48.1 KEY LANGUAGE THE ZERO CONDITIONAL

The zero conditional uses "if" or "when" with the present simple, followed by the present simple in the main clause.

Both can be used without changing the meaning.

If **When** } **you heat water, it boils.**

ACTION

RESULT



48.2 FURTHER EXAMPLES THE ZERO CONDITIONAL

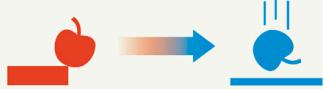
If **you heat ice, it melts.**



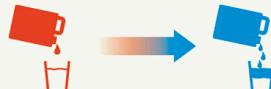
When **you put a rock in water, it sinks.**



If **you drop an apple, it falls.**



When **you pour oil onto water, it floats.**



48.3 HOW TO FORM THE ZERO CONDITIONAL

"IF / WHEN"

If

When

Both can be used.

ACTION (PRESENT SIMPLE)

you heat water

Present simple describes the action.

COMMA

,

RESULT (PRESENT SIMPLE)

it boils.

Result is described using present simple.



48.4 MATCH THE BEGINNINGS OF THE SENTENCES TO THE CORRECT ENDINGS

When carbon reacts with oxygen,

1 If you throw a ball up,

2 If you mix blue and yellow paint,

3 When you freeze water,

4 If you put sugar in water,

5 If you set fire to paper,

6 If you don't water plants,

7 When you boil water,

it falls down again.

it turns to ice.

it burns.

you get carbon dioxide.

you make green paint.

you produce steam.

it dissolves.

they die.



48.5 READ THE ARTICLE AND ANSWER THE QUESTIONS

Static electricity can make your hair stick out.

True False Not given

1 Static electricity can't make a can move on its own.

True False Not given

2 Static electricity can power a light bulb.

True False Not given

3 Static electricity can make water move away.

True False Not given

4 Static electricity doesn't make things stick to walls.

True False Not given

5 Static electricity can give you an electric shock.

True False Not given



FUN SCIENCE: Static Electricity

When you rub a balloon against your hair, it makes your hair stick out. This is because you've generated static electricity.

Static electricity can also move an empty soda can. Rub the balloon against your hair, then put the balloon near the can. The can rolls away by itself.

Static electricity can also move water. Turn on a faucet, so that water is dripping. If you rub the balloon on your hair again and put the balloon near the water, the water moves away from the balloon.

Static electricity can make things stick. If you rub the balloon on your hair then put the balloon on a wall, it sticks to the wall.



48.6 LISTEN TO THE AUDIO, THEN NUMBER THE SENTENCES IN THE ORDER YOU HEAR THEM



Ayida is giving her class a science lesson.

A Water in the form of a gas is called steam.

B Water can be a solid, a liquid, or a gas. 1

C Water becomes ice if we cool it to 32°F.

D Steam becomes liquid again when it cools.

E When water boils, it changes to a gas.

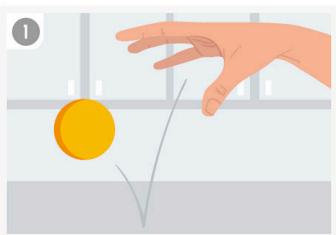
F If we heat water, it boils.

Aa

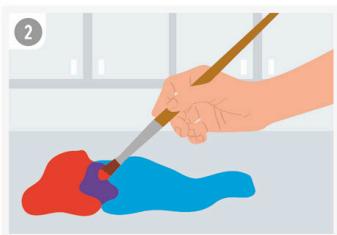
48.7 LOOK AT THE PICTURES AND FILL IN THE GAPS USING THE WORDS IN THE PANEL



When you heat butter, it melts.



If you bounce a ball, it bounces.



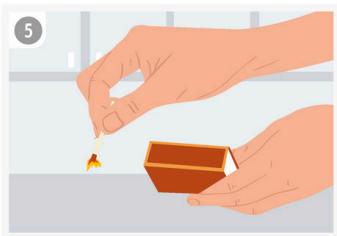
If you mix red and blue, you get purple.



When you put salt in water, it dissolves.



If you boil water, it becomes steam.



When you strike a match, it burns.

get

bounces

strike

boil

dissolves

mix

heat

put

burns

melts

drop

becomes



48.8 ANOTHER WAY TO SAY THE ZERO CONDITIONAL

Sentences using the zero conditional can be reversed, so the result comes before the action.

Use a comma if the action comes first.

When you freeze water, ice forms.

The result can come at the beginning of the sentence.

"If" or "when" can sit between the action and result, without a comma.

48.9 SAY THE SENTENCES OUT LOUD, REVERSING THE ORDER OF THE PHRASES

If it rains, the grass gets wet.

The grass gets wet if it rains.

1 You get orange if you mix red and yellow.

2 When you boil water, you produce steam.

3 If there is no oxygen, wood doesn't burn.

4 It gets dark when the sun sets.

48.10 REWRITE THE SENTENCES, PUTTING THE WORDS IN THE CORRECT ORDER

a drop If falls. it rock, you

If you drop a rock, it falls.

1 when it. melts ice you heat

2 ball, moves. If kick it you a

3 water grow you Plants them. if

4 sun rises, light. it When gets the

48 ✓ CHECKLIST

 Zero conditional

 Aa Scientific facts

 Talking about general truths