

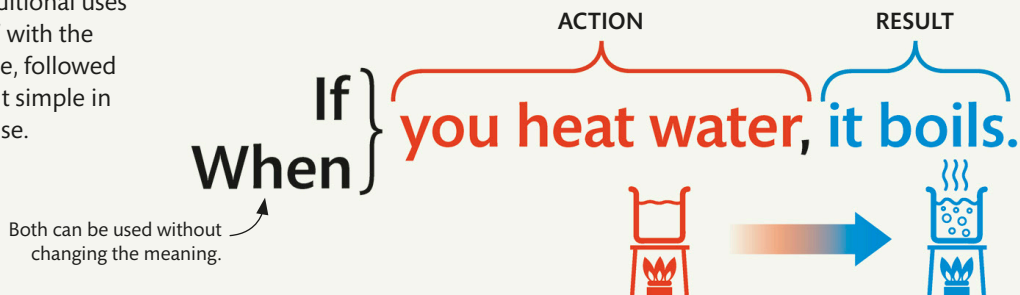
48 Things that are always true

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
- 🔤 **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.



48.2 FURTHER EXAMPLES THE ZERO CONDITIONAL

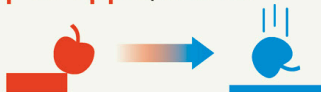
If **you heat ice,** **it melts.**



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



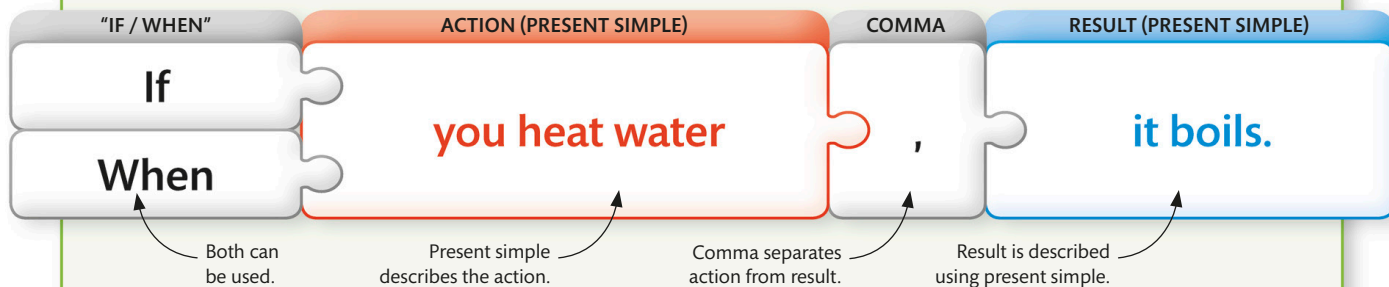
If **you drop an apple,** **it falls.**



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



48.3 HOW TO FORM THE ZERO CONDITIONAL





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.

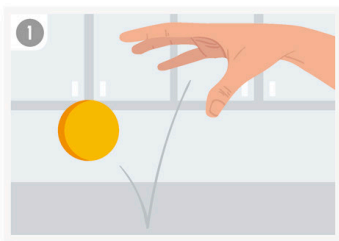
- | | |
|--|---|
| A Water in the form of a gas is called steam. <input type="checkbox"/> | D Steam becomes liquid again when it cools. <input type="checkbox"/> |
| B Water can be a solid, a liquid, or a gas. <input checked="" type="checkbox"/> | E When water boils, it changes to a gas. <input type="checkbox"/> |
| C Water becomes ice if we cool it to 32°F. <input type="checkbox"/> | F If we heat water, it boils. <input type="checkbox"/> |

Aa

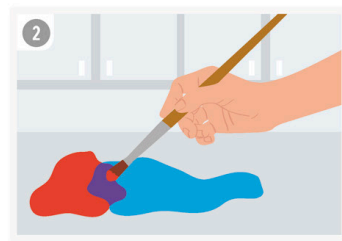
48.7 LOOK AT THE PICTURES AND FILL IN THE GAPS USING THE WORDS IN THE PANEL



When you heat
butter, it melts.



If you _____ a ball,
it _____.



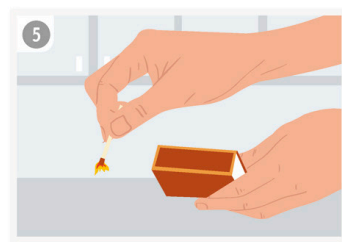
If you _____ red and
blue, you _____ purple.



When you _____ salt
in water, it _____.



If you _____ water,
it _____ steam.



When you _____
a match, it _____.

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.

When **you freeze water**, **ice forms**.

Use a comma if the action comes first.

Ice forms when **you freeze water**.

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 ☐