



People Who Changed the World

The extraordinary story of Marie Curie and the power of relative clauses

B2

Reading

Grammar

40 min

Lesson Objectives

- Read a biography of Marie Curie
- Learn vocabulary related to science and achievement
- Use defining and non-defining relative clauses
- Choose between who, which, that, whose, where, when
- Discuss people who have made a difference
- Write a short biography using relative clauses

1 Before You Read

- Who is a person from history that you admire? What did they achieve?
- Can you name any female scientists? What are they famous for?
- What qualities do you think a person needs to change the world?

2 Reading: Marie Curie — A Life of Discovery

"Nothing in life is to be feared, it is only to be understood." — Marie Curie

Marie Curie, **who** was born Maria Skłodowska in Warsaw in 1867, is one of the most remarkable scientists in history. She was a woman **who** broke barriers in a world **that** was almost entirely dominated by men, and **whose** discoveries continue to save millions of lives today. Her story is one of extraordinary determination and personal sacrifice.

Curie grew up in Poland, **which** was under Russian occupation. Women were not allowed to attend university, so she enrolled in an underground institution. At 24, she moved to Paris, **where** she studied physics at the Sorbonne. Despite hardships — a freezing attic, barely enough food — she graduated first in her class in 1893.

In Paris she met Pierre Curie, a physicist **whose** work on crystals had earned him recognition. They began a collaboration **that** would change science. Marie, **who** was fascinated by radioactivity, chose it for her doctoral research — a decision **that** many considered foolish.

Working in a shed **which** had no heating, they discovered polonium, **which** Marie named after Poland, and radium. The work was physically exhausting. She did not know the radiation **which** fascinated her was destroying her health.

In 1903 she became the first woman **who** received a Nobel Prize. In 1911 she won a second — an achievement **that** very few have matched. During WWI she built mobile X-ray units, **which** helped over a million troops. Her daughter Irene, **who** she trained to operate the equipment, later won her own Nobel Prize.

Curie died in 1934 from radiation exposure. Her notebooks, **which** are still radioactive, are kept in lead-lined boxes. Visitors **who** wish to view them must wear protective clothing. Even in death, she reminds us of the price **that** pioneers pay for pushing boundaries.

3 Vocabulary

Word	Definition	Example
remarkable	extraordinary	<i>She led a remarkable life.</i>
dominated	controlled; had power over	<i>Science was dominated by men.</i>
determination	firm resolve despite difficulty	<i>Her determination inspired others.</i>
sacrifice	giving up something valuable	<i>Great personal sacrifices.</i>
occupation	foreign military control	<i>Poland under Russian occupation.</i>
underground	secret; in hiding	<i>An underground university.</i>
hardship	difficult conditions	<i>Years of hardship.</i>
recognition	acknowledgement of achievement	<i>International recognition.</i>
collaboration	working together	<i>Their collaboration produced results.</i>
radioactivity	emission from unstable atoms	<i>Radioactivity can be dangerous.</i>
element	basic chemical substance	<i>Two new elements.</i>
exhausting	making extremely tired	<i>Physically exhausting work.</i>
achievement	accomplished through effort	<i>An incredible achievement.</i>
dedication	commitment to a purpose	<i>Dedication never wavered.</i>
pioneer	first to explore/develop	<i>A pioneer in physics.</i>

Word	Definition	Example
liability	legal responsibility	Sign a liability waiver.

Collocations: break barriers • make a discovery • win a prize • push the boundaries • change the course of • earn recognition • personal sacrifice • front lines

4 Grammar: Relative Clauses

□ In the Text, You Saw...

- Defining (who): "A woman **who** broke barriers."
- Defining (that): "A collaboration **that** would change science."
- Non-defining (which): "Polonium, **which** she named after Poland."
- Possession (whose): "A physicist **whose** work was famous."
- Place (where): "Paris, **where** she studied physics."

Pronoun	Used for	Defining	Non-defining
who	people	□	□
which	things/animals	□	□
that	people+things	□	□
whose	possession	□	□
where	places	□	□
when	times	□	□

DEFINING vs NON-DEFINING

Defining (no commas, essential): "The woman who discovered radium was Polish."

Non-defining (commas, extra info): "Marie Curie, who was Polish, discovered radium."

□ Key Rules

1. That CANNOT be used in non-defining clauses.
2. You can omit the pronoun in defining clauses when it's the object.
3. Non-defining clauses always use commas.

△ Common Mistakes

- "Marie Curie, that was Polish..." → □ "... who was Polish..."
- "The scientist which discovered..." → □ "... who discovered..."
- "The man who his car..." → □ "... whose car was stolen."

5 □ Exercise: Combine the Sentences

Join each pair using the correct relative pronoun.

1. Marie Curie was a scientist. + She discovered radium.
2. Radium is an element. + It glows blue.
3. She moved to Paris. + She studied physics there.
4. Pierre was a physicist. + His work was famous.
5. The Sorbonne admitted women. + She studied there.
6. She won the Nobel Prize in 1903. + No woman had received it before.
7. The shed had no heating. + They worked there.
8. Her notebooks are radioactive. + They are kept safely.
9. 1934 was the year. + Marie Curie died.
10. Irene was Marie's daughter. + She won a Nobel Prize.

□ Answers

1. Marie Curie was a scientist who discovered radium.
2. Radium is an element which/that glows with a blue light.
3. She moved to Paris where she studied physics.
4. Pierre was a physicist whose work was famous.
5. The Sorbonne was a university that admitted women.
6. She won the Nobel Prize, which no woman had received before.
7. The shed where they worked had no heating.
8. Her notebooks, which are radioactive, are kept safely.
9. 1934 was the year when Marie Curie died.
10. Irene, who was Marie's daughter, also won a Nobel Prize.

6 □ Comprehension Quiz

1. Where was Marie Curie born?

Answer: Warsaw, Poland

2. Why did she attend an underground university?

Answer: Women were banned from university in Poland

3. How many Nobel Prizes did she win?

Answer: Two

4. What are her notebooks stored in?

Answer: Lead-lined boxes

5. Which pronoun: 'The scientist ___ discovered radium'?

Answer: who

6. Which is non-defining?

Answer: Marie Curie, who was Polish, discovered radium. (commas = non-defining)

7. 'The man ___ car was stolen' — which pronoun?

Answer: whose

8. Can 'that' be used in non-defining clauses?

Answer: No, never

7

Fill in the Blanks

Word box: who • which • whose • where • that • when • which • who

1. She was the woman ___ discovered radium.
2. Radium, ___ glows blue, was found in 1898.
3. Pierre was a scientist ___ research was famous.
4. The Sorbonne was the university ___ she studied.
5. The shed ___ they worked in had no heating.
6. 1903 was the year ___ she won the Nobel Prize.
7. Her notebooks, ___ are still radioactive, are kept safely.
8. Visitors ___ want to see them must wear protection.

Answers: 1. who • 2. which • 3. whose • 4. where • 5. that • 6. when • 7. which • 8. who

8

Speaking & Writing

Discussion Questions

1. Who is a person who has changed the world positively?
2. Has the situation for women in science improved today?
3. Do pioneers always have to make personal sacrifices?
4. If you could meet any historical figure, who would you choose?
5. Are there modern scientists whose work fascinates you?

Example Dialogue**A:** Have you heard of Rosalind Franklin, whose work helped discover DNA's structure?**B:** Yes! The scientist who took Photo 51.**A:** She worked at King's College, where she used X-ray techniques.**B:** Watson and Crick, who won the Nobel, didn't credit her properly.**A:** She died in 1958, which was before the prize was awarded.**B:** A person whose contribution should never be forgotten.**Writing Task**

Write 80-120 words about a person who has changed the world:

- When and where were they born?
- What is the achievement that made them famous?
- Why is their work important?

Use at least 4 relative clauses with different pronouns.

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Review Checklist

I can now...

- understand a biography about Marie Curie
- use vocabulary related to science and achievement
- form defining relative clauses (essential information)
- form non-defining relative clauses (extra info, with commas)
- choose correctly between who, which, that, whose, where, when
- write a biography using relative clauses



Congratulations!

You have completed Lesson 6: People Who Changed the World.