Marie Curie (1867 - 1934)

Maria Salomea Sklodowska was born in Warsaw, Poland, on November 7th 1867. She was the youngest of five children - three older sisters and a brother. Her mother was a Headmistress and her father taught Maths and Physics and he introduced the subjects to Maria when she was a child. When Maria was young, Poland was ruled by Russia. Maria’s family didn’t like the rules the Russian government made, however. For example, it was against the law to speak Polish and it was illegal for girls to go to school. Maria was clever and curious, though, so her parents decided to send her to a secret school, where she did extremely well.

Unfortunately, however, not everything in Maria’s early life was easy. In 1877, when Maria was just 10 years old, her oldest sister died from typhus and in 1979 her mother died of tuberculosis. Maria and her family were heartbroken. Maria finished school when she was 15. She and her sister, Bronya were both interested in scientific research and after school, they both desperately wanted to go to University. The University in Warsaw, however, only allowed men to attend at the time. Women were allowed to go to University in other countries, but that was very expensive. So Maria and Bronya promised each other that they would take turns working to pay for the other to travel abroad to study. Maria thought that every child should be educated, so for almost 5 years, she secretly worked as a governess and a tutor, illegally teaching poor children to read. She sent the money she earned to Bronya, who attended University and became a doctor, which was almost unheard of for women at the time.

In 1891, Maria moved to Paris. She changed her name to Marie because it sounded more French. She studied at the Sorbonne, a famous University, where she earned a degree in physics, maths and chemistry. Later, she gained a master’s degree in physics and then yet another degree in maths. Marie was so poor while she was there, however, that she had to live on bread and tea and she sometimes fainted from hunger!

While she was in Paris, Marie met Pierre Curie, a physics professor. They soon fell in love and were married in 1895. Marie worked with her husband in scientific research to investigate x-rays, ‘radioactivity’, and how atoms work. In 1898 Marie and Pierre discovered two new substances, called polonium (named after Poland) and radium. In 1903, they won a joint Nobel Prize for their work in physics, making Marie the first woman ever to win the award.
Marie and Pierre had two children - Irene born in 1897 and Eve, born in 1904. Sadly, in 1906, when Eve was just 2 years old, Pierre was killed when he was knocked down in the street by a horse drawn carriage. Marie was devastated, of course, but she decided to take over Pierre’s work. She became the first ever female professor at the Sorbonne University, and she won a Nobel Prize of her own for her work in Chemistry in 1911. Soon after this, doctors found that radiology could help with curing cancer.

Then, in 1914, the First World War started. Marie realised if military doctors had access to x-ray machines, they could make better medical decisions and save more lives. She helped to develop mobile x-ray machines and put them into ambulances, which she herself drove to the wounded soldiers on the front line.

These vehicles became known as ‘Little Curies’ in Marie’s honour and they helped over 1 million soldiers during the war. She trained doctors and taught them how to use this new life-saving equipment and in 1921, she set up the Curie Institute in Paris. It is still an important cancer research centre today.

Marie didn’t realise it, but the radioactive substances she worked with were very dangerous. As a result of working with them for such a long time, Marie developed leukaemia, a blood disease, and died on 4th July 1934, aged 66.

Marie’s discoveries of radium and polonium have changed science and medicine forever. Her work meant that x-ray machines became more useful and were used more by doctors. They continue to be used today to detect broken bones and other problems, helping doctors to treat and cure their patients.
Comprehension Questions

Learning Objectives

- I can retrieve and record information from non-fiction
- I understand what I read independently by drawing inferences and justifying inferences with evidence

Read the text and answer the questions below

1. Where and when was Maria born?

.................................................................

2. Why was Maria’s father influential in her career?

.................................................................

3. How did Maria help her sister to go to University?

.................................................................

4. Find 5 facts in the text about Maria’s education, including University.

   i. .................................................................

   ii. .................................................................

   iii. .................................................................

   iv. .................................................................

   v. .................................................................

5. List 5 things that happened to Maria in Paris

   i. .................................................................

   ii. .................................................................

   iii. .................................................................

   iv. .................................................................

   v. .................................................................
6. What was Marie’s husband called?

6. What was Marie’s husband called?

7. What did Marie and Pierre Curie investigate?

7. What did Marie and Pierre Curie investigate?

8. Which substances did Marie and Pierre discover?

8. Which substances did Marie and Pierre discover?

9. How do you think Marie and Pierre felt about receiving the Nobel Prize for their work in Physics? Why?

9. How do you think Marie and Pierre felt about receiving the Nobel Prize for their work in Physics? Why?

10. What were ‘Little Curies’?

10. What were ‘Little Curies’?

11. How and when did Marie Curie die?

11. How and when did Marie Curie die?
Marie Curie (1867 - 1934)

Marie Sklodowska was born in Warsaw, Poland, on November 7th 1867. She was the youngest of five children. Her mother was a Headmistress and her father taught Maths and Physics. He introduced Marie to the subjects when she was young. Marie was clever and curious, but it was against the law in Poland for girls to go to school at that time, so her parents decided to send her to a secret school, where she did extremely well.

Unfortunately, however, not everything in Marie’s early life was easy. In 1877, when Marie was just 10 years old, her oldest sister died from typhus and in 1879 her mother died of tuberculosis. Marie and her family were heartbroken.

After she had finished school, aged 15, Marie and her sister, Bronya both desperately wanted to go to University, but the University in Warsaw only allowed men to attend at the time. Women were allowed to go to University in other countries, but that was very expensive. So Marie and Bronya promised each other that they would take turns working to pay for the other to travel abroad to study. For almost 5 years, Marie secretly worked as a governess and a tutor, illegally teaching poor children to read. She sent the money she earned to Bronya, who attended University and became a doctor, which was almost unheard of for women at the time.

In 1891, Marie moved to Paris, to study at the Sorbonne, a famous University, where she earned a degree in physics, maths and chemistry. Later, she gained a master’s degree in physics and then another degree in maths. Marie was so poor while she was there, however, that she had to live on bread and tea and she sometimes fainted from hunger!

While she was in Paris, Marie met Pierre Curie, a physics professor. They soon fell in love and were married in 1895. Marie worked with her husband in scientific research to investigate x-rays, ‘radioactivity’, and how atoms work. In 1898 Marie and Pierre discovered two new substances, called polonium (named after Poland) and radium. In 1903, they won a joint Nobel Prize for their work in physics making Marie the first woman ever to win the award.
She became the first ever female professor at the Sorbonne University, and she won a Nobel Prize of her own for her work in Chemistry in 1911. Soon after this, doctors found that radiology could help with curing cancer.

Then, in 1914, First World War started. Marie realised if military doctors had access to x-ray machines, they could make better medical decisions and save more lives. She helped to develop mobile x-ray machines and put them into ambulances, which she drove to the wounded soldiers on the front line. These vehicles became known as ‘Little Curies’ in Marie’s honour and they helped over 1 million soldiers during the war.

She trained doctors and taught them how to use this new life-saving equipment and in 1921, she set up the Curie Institute in Paris. It is still an important cancer research centre today.

Marie didn’t realise it, but the radioactive substances she worked with were very dangerous. As a result of working with them for such a long time, Marie developed leukaemia, a blood disease, and died on 4th July 1934, aged 66.

Marie’s discoveries of radium and polonium have changed science and medicine forever. Her work meant that x-ray machines became more useful and were used more by doctors. They continue to be used today to detect broken bones and other problems, helping doctors to treat and cure their patients.
Comprehension Questions

Learning Objectives

- I can retrieve and record information from non-fiction
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Read the text and answer the questions below

1. Where and when was Maria born?

2. Why was Maria’s father influential in her career?

3. How did Maria help her sister to go to University?

4. Find 3 facts in the text about Maria’s education, including University.
   i.
   ii.
   iii.

5. List 3 things that happened to Maria in Paris
   i.
   ii.
   iii.

6. What was Marie’s husband called?

7. What did Marie and Pierre Curie investigate?
8. Which substances did Marie and Pierre discover?

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9. How do you think Marie and Pierre felt about receiving the Nobel Prize for their work in Physics? Why?

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10. What were ‘Little Curies’?

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Marie Skłodowska was born in Warsaw, Poland, on November 7th 1867. Marie was a very clever child, but it was against the law in Poland for girls to go to school at that time, so her parents decided to send her to a secret school, where she did extremely well.

In 1877, when Marie was just 10 years old, her oldest sister died from typhus and in 1879 her mother died of tuberculosis. Marie and her family were heartbroken.

After she had finished school, aged 15, Marie secretly worked as a tutor for 5 years, illegally teaching poor children to read so she could save up some money to help her sister, Bronya, attend University. Bronya was very successful and she became a doctor, which wasn’t very common for women at the time.

Marie also wanted to go to University and in 1891, she moved to Paris, to study at the Sorbonne University, where she earned a degree in physics, maths and chemistry. Marie was so poor while she was there, however, that she had to live on bread and tea and she sometimes fainted from hunger!

While she was in Paris, Marie met Pierre Curie, a physics professor, who she married in 1895. Marie worked with her husband to investigate x-rays, ‘radioactivity’, and how atoms work. In 1898, they discovered two new substances, called polonium (named after Poland) and radium. In 1903, they won the Nobel Prize for their work in physics, making Marie the first woman ever to win the award.

Marie and Pierre had two children - Irene, born in 1897 and Eve, born in 1904. Sadly, in 1906, when Eve was just 2 years old, Pierre was killed when he was knocked down by a horse drawn carriage. Marie was devastated, but she decided to take over Pierre’s work, becoming the first ever female professor at the Sorbonne University, and she won another Nobel Prize for her work in Chemistry in 1911.

Then the First World War started in 1914. Marie helped to develop mobile x-ray machines for ambulances, so that doctors could make better medical decisions and save more lives. These vehicles became known as ‘Little Curies’ in Marie’s honour and they helped over 1 million soldiers during the war.
Marie trained doctors and taught them how to use this life-saving equipment and in 1921, she set up the Curie Institute in Paris. It is still an important cancer research centre today.

Marie didn’t realise it, but the radioactive substances she worked with were very dangerous. As a result of working with them for such a long time, Marie developed leukaemia, a blood disease, and died on 4th July 1934, aged 66.

Marie’s discoveries of radium and polonium changed have science and medicine forever. Her work meant that x-ray machines became more useful and were used more by doctors. They continue to be used today to detect broken bones and other problems, helping doctors to treat and cure their patients.
Comprehension Questions

Learning Objectives

- I can retrieve and record information from non-fiction
- I understand what I read independently by drawing inferences and justifying inferences with evidence

Read the text and answer the questions below

1. Where and when was Maria born?

2. How did Marie help her sister to go to University?

3. Which year and where did Marie Curie attend University?

4. What did Marie Curie study at University?

5. What was Marie’s husband called?

6. What did Marie and Pierre Curie investigate?

7. Which substances did Marie and Pierre discover?

8. Which award did Marie Curie receive in 1903 and 1911?

9. What were ‘Little Curies’?

10. How and when did Marie Curie die?
Marie Curie (1867 - 1934)

- Marie Sklodowska was born in Warsaw, Poland, on November 7th 1867.
- Marie was a very clever child
- It was against the law in Poland for girls to go to school at that time, so her parents sent her to a secret school, where she did extremely well.
- In 1877, when Marie was just 10 years old, her oldest sister died from typhus
- Then 1879, Marie’s mother died of tuberculosis. After she had finished school, Marie secretly worked as a tutor, illegally teaching poor children to read.

- She saved up some money to help her sister, Bronya, go to University.
- In 1891, Marie moved to Paris, to study at the Sorbonne University
- She earned a degree in physics, maths and chemistry.
- She was so poor that she had to live on bread and tea and sometimes fainted from hunger!
- Then Marie met Pierre Curie, a physics professor, who she married in 1895.
- Together, they investigated x-rays, ‘radioactivity’, and how atoms work.
- In 1898, they discovered two new substances, called polonium (named after Poland) and radium.
- In 1903, they won the Nobel Prize for their work in physics, making Marie the first woman ever to win the award.
- Marie and Pierre had two children - Irene (born in 1897) and Eve (born in 1904).
- Sadly, in 1906, Pierre was knocked down by a horse drawn carriage and was killed.
- Marie decided to take over Pierre’s work, becoming the first ever female professor at the Sorbonne University.
- She won another Nobel Prize for her work in Chemistry in 1911.
- Soon afterwards, doctors found that radiology could help with curing cancer.
- In 1914, the First World War started.
- Marie helped to put mobile x-ray machines into ambulances, so that doctors could save more lives.
- These vehicles became known as ‘Little Curies’ and they helped over 1 million soldiers during the war.
Marie Curie comprehension D

- Marie trained doctors and taught them how to use this life-saving equipment.
- In 1921, she set up the Curie Institute in Paris, which is still an important cancer research centre today.
- Marie developed a blood disease called leukaemia because she worked with dangerous radioactive substances for such a long time.
- She died on 4th July 1934, aged 66.
- Marie’s discoveries have changed science and medicine forever.
- Her work meant that x-ray machines became more useful. They are still used today to detect broken bones and other problems, helping doctors to treat and cure their patients.
Comprehension Questions

Learning Objectives

- I can retrieve and record information from non-fiction
- I understand what I read independently by drawing inferences and justifying inferences with evidence

Read the text and answer the questions below

1. Where and when was Maria born?

2. How did Marie help her sister to go to University?

3. Which year and where did Marie Curie attend University?

4. What did Marie Curie study at University?

5. What was Marie’s husband called?

6. What did Marie and Pierre Curie investigate?

7. Which substances did Marie and Pierre discover?

8. Which award did Marie Curie receive in 1903 and 1911?

9. What were ‘Little Curies’?

10. How and when did Marie Curie die?
### Timeline

#### Learning Objectives

- I can retrieve and record information from non-fiction

Read the information about Marie Curie’s life, then cut out the dates and events below, match them and sort them into chronological order.

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
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<td>1898</td>
<td>Marie died, aged 66.</td>
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<tr>
<td>1903</td>
<td>Marie moved to Paris and started studying at the Sorbonne University</td>
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<td>Marie and Pierre’s first daughter, Irene was born</td>
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<tr>
<td>1906</td>
<td>The First World War started and Marie helped to save soldiers’ lives by installing mobile x-ray machines into ambulances, called ‘Little Curies’</td>
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<td>4th July 1934</td>
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Find all the words linked to Marie Curie in the word search below

word search

chemistry  nobel prize  polonium  warsaw
curie  paris  radioactive  x-ray
marie  physics  radium
maths  pierre  science
medicine  poland  sorbonne
After completing the comprehension, fill in the fact sheet below

**Marie Curie**

- **Born:**
- **Died:**

**Pierre Curie**

- **Early life:**
- **Later life:**

**Achievements:**

**Interesting facts:**
Extension writing task

Learning Objectives:

- I can plan my writing by discussing and recording ideas
- I can draft and write by organising paragraphs around a theme

Write a diary entry for the day Marie Curie won a Nobel Prize for her work in Chemistry

LA Remember to:

Write in the past tense
Write in the first person
Write about the most important events
Write about where the events took place
Use time connectives to order the events
Write about feelings

MA Remember to do all of the above and also to:

Use paragraphs to organise your writing
Write about feelings, reactions and opinions

HA Remember to do all of the above and also to:

Write an introduction to set the scene
Write using informal language
Use adventurous vocabulary to describe the most important events
Comprehension A answers

1. Maria was born in Warsaw, Poland on 7th November 1867

2. Maria’s father was influential in her career because he taught Maths and Physics and he introduced the subjects to Maria when she was a child.

3. For almost 5 years, Maria secretly worked as a governess and a tutor, illegally teaching poor children to read. She sent the money she earned to her sister, who attended University and became a doctor.

4. Five facts:
   i. Maria’s parents decided to send her to a secret school
   ii. Maria did extremely well at school
   iii. Maria finished school when she was 15.
   iv. In 1891, Maria moved to Paris and studied at the Sorbonne, a famous University
   v. Marie earned a degree in physics, maths and chemistry. Later, she gained a masters degree in physics and then yet another degree in maths.

5. Pick 5 from:
   - Maria moved to Paris in 1891.
   - She changed her name to Marie because it sounded more French.
   - She studied at the Sorbonne, a famous University
   - She earned a degree in physics, maths and chemistry. Later, she gained a masters degree in physics and then yet another degree in maths.
   - Marie often fainted from hunger because she was so poor and had to live on bread and tea
   - Marie met Pierre Curie
   - Marie and Pierre got married in 1895.
   - Marie worked with her husband in scientific research
   - In 1903, they won a joint Nobel Prize
   - Marie and Pierre had two children
   - Pierre was killed

6. Marie’s husband was called Pierre


8. Marie and Pierre discovered polonium and radium
9. Several answers could be used here - excited, proud, happy etc and any related reason - e.g. They had worked hard to achieve this and were pleased to be recognised for their work

10. Little Curies were the ambulances which had mobile x-ray machines on board to help the injured soldiers in the First World War

11. Marie developed leukaemia, a blood disease, as a result of over exposure to radiation. She died on 4th July 1934, aged 66.
Comprehension B answers

1. Marie was born in Warsaw, Poland on 7th November 1867

2. Marie’s father was influential in her career because he taught Maths and Physics and he introduced the subjects to Marie when she was a child.

3. For almost 5 years, Marie secretly worked as a governess and a tutor, illegally teaching poor children to read. She sent the money she earned to her sister, who attended University and became a doctor.

4. Pick 3 from:
   - Marie’s parents decided to send her to a secret school
   - Marie did extremely well at school
   - Marie finished school when she was 15.
   - In 1891, Marie moved to Paris and studied at the Sorbonne, a famous University
   - Marie earned a degree in physics, maths and chemistry. Later, she gained a masters degree in physics and then yet another degree in maths.

5. Pick 3 from:
   - Marie moved to Paris in 1891.
   - She changed her name to Marie because it sounded more French.
   - She studied at the Sorbonne, a famous University
   - She earned a degree in physics, maths and chemistry. Later, she gained a masters degree in physics and then yet another degree in maths.
   - Marie often fainted from hunger because she was so poor and had to live on bread and tea
   - Marie met Pierre Curie
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   - Marie worked with her husband in scientific research
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10. Little Curies were the ambulances which had mobile x-ray machines on board to help the injured soldiers in the First World War.

11. Marie developed leukaemia, a blood disease, as a result of over exposure to radiation. She died on 4th July 1934, aged 66.
Comprehension C and D answers

1. Marie was born in Warsaw, Poland on 7th November 1867

2. For almost 5 years, Maria secretly worked as a governess and a tutor, illegally teaching poor children to read. She sent the money she earned to her sister, who attended University and became a doctor.

3. Marie moved to Paris in 1891, where she studied at the Sorbonne University.

4. Marie studied physics, maths and chemistry at University.

5. Marie’s husband was called Pierre.


7. Marie and Pierre discovered polonium and radium.

8. Marie Curie received the Nobel Prize in 1903 and 1911.

9. Little Curies were the ambulances which had mobile x-ray machines on board to help the injured soldiers in the First World War.

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## Timeline Answers

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Word search answers

w m y e h z e j e h j b z e s
a a d u z u y n s z z h g c z
s t k n f i n p o l o n i u m
r h j c a o r t z t j e y q i
a s a a b l m p s j n y a r x
w y i r m t o v l c e g n h y
u o o j t e r p e e z j a p r
i s f y w a d k u l b l i h t
ev i t c a o i d a r o p y s
er re i p c x c m p a n s i
m a r i e o m u u i r e y i m
j o t y m e e i r i n a h c e
t l i e v j d o s i z e j s h
e x u q o a n z a p e b o g c
k k l x r n x n d z q k l h y