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## Rutherford's Nuclear Atom

🔊 Listen

Ernest Rutherford was born in New Zealand into a poor farming family in 1871. When the young "Ern," as his family called him, received his first science book at the age of ten, he was hooked; nevertheless, he still had to keep working at the farm chores. He was very studious and managed to obtain university scholarships. Throughout his university days in New Zealand, he studied and invented high-frequency electrical circuits and worked with radio waves. After he graduated with his Master's degree, he looked for a job as a school teacher. Evidently, he must not have been very good at it because, even after his third try, he could not get a permanent job. When he fell in love with the beautiful Mary Newton, he decided that without a good job, they could not afford to get married. Failing to get a job, he went back to his parents' farm to help with the work. ...

**Rutherford's Nuclear Atom**  
Full Story



**Datum:** 07/14/2015  
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## Biographies und historical backgrounds

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| <a href="#">Biography: Ernest Rutherford</a> 🔊 | 07/14/2015 | 107 KB (PDF) |
| <a href="#">Historical background: Atoms</a> 🔊 | 07/14/2015 | 212 KB (PDF) |

[Translate to 2-English:]

## Materialien zum "Geschichten erzählen"

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## Educational Resources

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| <a href="#">Student's Learning Activities</a> 🔊 | 07/22/2015 | 443 KB (PDF) |
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## Educational Resources

- › [Simulation](#)
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## Historical Resources

## A Primary Sources

**Geiger, H./Marsden, E.:** On a Diffuse Reflection of the Alpha-Particles, in: Proceedings of the Royal Society of London A 82 (31.07.1909), S. 495–500.

**Rutherford, Ernest:** Radio-activity 1905, available online:<http://archive.org/details/radioactivity00ruth>.

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**Rutherford, Ernest:** Radioactive Substances and their Radiations 1913, available online:<http://archive.org/details/radioactivesubst00ruthoft>.

## B Secondary Sources

**Andrade, E. N. da C:** Rutherford and the Nature of the Atom, Garden City, N.Y. 1964.

**Heilbron, John L.:** Historical Studies in the Theory of Atomic Structure, New York, 1. pub. 1981.

**Reeves, Richard:** A Force of Nature: The Frontier Genius of Ernest Rutherford, New York 2008.

**Rowland, John:** Ernest Rutherford: Atom Pioneer, New York 1957.

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