



People and microscopy in focus (11-16)

Antonie van Leeuwenhoek



Connect with nature

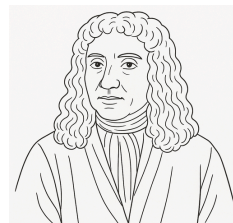
Promote microscopy

Inspire STEM

Introduction

Antonie Philips van Leeuwenhoek (say: Lay-ven-hook) worked first as a linen draper, but in the 1660s he became fascinated with microscopes. In 1668 he visited London and read Robert Hooke's *Micrographia*, which inspired him. By 1673 he was sending letters to the Royal Society describing his discoveries. He wrote over 300 letters about his observations.

Using glass beads as lenses mounted on brass plates, van Leeuwenhoek created microscopes. He observed and described living microorganisms such as protozoa. He became the first to see bacteria, which he called "animalcules" as well as blood cells, capillaries, rotifers, and nematodes. Because of these discoveries, he is recognised as the Father of Microbiology.



1632 : Born in Delft, Dutch Republic
1650s: Worked as a linen draper
1668: Inspired by Robert Hooke's book *Micrographia* during a visit to London
1673: Sent first letter with microscopic observations to the Royal Society
1674–1676: Observed protozoa for the first time
1676: First to observe bacteria ("animalcules")
1677: First to observe sperm cells
1680: Elected Fellow of the Royal Society
1680s–1700s: Observed blood cells, capillaries, nematodes, and rotifers
1723: Died in Delft, aged 90

Activities

From the text:

1. Draw a timeline of van Leeuwenhoek's discoveries. Add images and details.
2. Explain what "animalcules" were. Why do you think he chose this name?
3. Why is van Leeuwenhoek remembered as the Father of Microbiology?

Research Further – online:

1. What is the Royal Society, and what does it mean to be elected a Fellow?
2. Search for an image of van Leeuwenhoek's microscope. Draw and label it. How does it work? Compare it to a modern compound microscope.
3. Compare the work of van Leeuwenhoek and Robert Hooke. What were their contributions to microscopy and microbiology?

