Robert Hooke was a scientist, experimenter, surveyor and architect, who achieved much across many fields of human inquiry. His *Micrographia* was a landmark in the study and depiction of the natural world’s smallest objects and creatures, previously unobserved by the naked eye.

*Micrographia* was the first book in English to show observations made under a microscope. It recreates these in large, full-page (sometimes fold-out) illustrations. In Hooke’s words, he used ‘a sincere hand, and a faithful eye, to examine, and record the things themselves as they appear’, on a scale ‘as if they were lions or elephants seen with the naked eye’. For 17th-century readers, this would have been something extraordinary – seeing the makeup of minute objects at a scale previously thought impossible. The illustration shown here, *The flea*, is one of the most famous. It would probably have horrified readers to discover that the small jumping granules looked like that! The sense of wonder was made even greater by the fold-out pages – a ceremonial unveiling of knowledge that was hiding in plain (but minuscule) sight.

*Micrographia* was the second publication to be issued by the Royal Society of London for Improving Natural Knowledge. The Royal Society, as it is more commonly called, was established in 1660 for the promotion, advancement and public dissemination of science.
Teaching ideas

The University of Melbourne’s curriculum is rich and varied, and changes from year to year. For more teaching ideas, contact a collection manager.

Microscopy for Biological Sciences

“The light microscope opened the 1st gate to microcosm. The electron microscope opened the 2nd gate to microcosm. What will we find opening the 3rd gate?” (Ernst Ruska, 1985). Consider this quote and discuss the most important visible discoveries to emerge from historical developments in microscopy.

A History of Nature

Discuss how the microscope and Hooke’s Micrographia changed the understanding of insects in the 17th century, and their influence on the founding of entomology as a scientific field.

Knowledge in the Making

Use Micrographia as an introduction to the new Royal Society in London. Think about the various ways the book would have appealed to the lay reader: the ‘wow’ factor of the fold-out illustrations, the publication in English, and the clarity of the text.

From Plato to Einstein

The 17th century was a rich period for discovery in science and human knowledge. Situate Hooke’s Micrographia and the study of objects under a microscope among other important advances in knowledge around the same time, for instance, Isaac Newton’s Principia (Philosophiæ naturalis principia mathematica, 1687).

Magic, Reason, New Worlds, 1450–1750

Consider the contribution of the microscope, Micrographia and/or more broadly the Royal Society in London, to the ‘modern science’ of the 17th century.

Astronomy in World History

‘By the means of Telescopes, there is nothing so far distant but may be represented to our view.’ (Robert Hooke, preface to Micrographia). Study the contributions that Robert Hooke, and more broadly the Royal Society in London, made to the study of astronomy in the 17th century.

Knowledge, Learning and Culture

Visit the Rare Books Collection and consider the experience of Micrographia as an object. Look at the presentation of the text and the fold-out illustrations, and discuss how successful it would have been at conveying new knowledge to readers in the 17th century.
Intersecting objects

John Evelyn (English, 1620–1706)

Sylva, or, A discourse of forest-trees, and the propagation of timber in His Majesties dominions
London: printed by Jo. Martyn and Ja. Allestry, printers to the Royal Society, 1664
Presented by the Friends of the Baillieu Library
Rare Books Collection
University of Melbourne Library

Horne, Thornthwaite & Wood (London)

Microscope, c. 1850–60
brass and other metal, glass, wood, velvet
11.0 × 8.2 × 12.3 cm (case)
Gift of AMA Victoria, 2011
Medical History Museum
University of Melbourne
MHM04013

To learn more, visit the websites of the Rare Books Collection and the Medical History Museum.

References

Dr William Poole (New College, Oxford University), Treasures of the Bodleian: Robert Hooke’s Micrographia, discussion of the Bodleian Library’s copy of Micrographia.