4 The Writings of Robert Boyle: Pupil Worksheets

FOR TEACHERS

Lesson Title: The Writings of Robert Boyle

Area of Learning: evidence

Aims: Pupils should be able to identify and evaluate sources of information which are used to develop an argument and reach and support conclusions about the life and work of Robert Boyle

Vocab: archive; printed book; manuscript; pamphlet; repository; reprint; edition; source; evidence; antiquarian; biography

Time frame: up to one hour; possibly completing lesson through finishing poster off for homework.

Resources: pupil worksheet and sources sheet

Pupil tasks: Pupils should do two tasks: read the introductory text describing the various sources for the history of Boyle's life and thought consulting the sources sheet as each source is mentioned; produce a poster illustrating the sources of Boyle's writings. The first task is often best done as a whole class using volunteers to read aloud. Teachers will need to ensure all pupils understand the rather complex description of the different sources of Boyle's printed and manuscript work through comments made after each chunk of the pupil text is read and after each source has been looked at by pupils. Teachers could question pupils on aspects of the sources illustrated (eg asking where the picture of Boyle appears in source five; asking where the date appears on source five). Teachers could draw basic representations of the different types of sources available on the board as the text on the pupils' worksheet is read out.

For the poster, pupils could be encouraged to cut out images presented on the worksheet and stick them onto their work, although teachers should ensure that pupils add clear annotations of their own. The aim of this activity is to ensure that pupils sort and understand the different types of sources available, knowing where they are kept, why they are important and how they are used.

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Read this text and look at the sources as they are mentioned. Then answer the questions and do the task which follows.

During his life Robert Boyle published more than 40 books and pamphlets on topics ranging from pneumatics to mineral waters (source one). Boyle also wrote several religious books, and he was a contributor to the first scientific journal, *Philosophical Transactions* (source two). Boyle also left a huge archive, which has been kept at the Royal Society in London since 1769 (source three). Many scholars have studied the materials in this archive from the 18th century just after Boyle died and even right into the early 21st century. The archive contains a wide variety of material relating to Boyle's life and work including: manuscript letters received by Boyle from other colleagues; manuscript drafts of Boyle's published writings; Boyle's manuscript notes on books he had read and experiments he had done and lists of its contents (source four).

Shortly after Boyle's death, an antiquarian called the Reverend Thomas Birch thought that Boyle was such an important figure that it would be a good idea to reprint the books that Boyle wrote. This he did in 1744 and produced a set entitled *The Works of the Honourable Robert Boyle* (source 5). He also thought a book about Boyle's life should be published, so, in the first volume of the *Works*, he included a biography (life story) entitled 'The Life of the Honourable Robert Boyle'. For this, he looked through Boyle's private archive, and used some of the materials there as evidence about Boyle's life. These volumes by Birch became the standard reference works on Boyle and many people have subsequently used them to find out about him. Recently, Professor Michael Hunter of London University has produced (with Edward B.Davis) another edition of Boyle's works in fourteen volumes in 1999-2000. These volumes have been purchased by many university libraries and scholars can use them to find out information about Boyle's life and work.

Questions

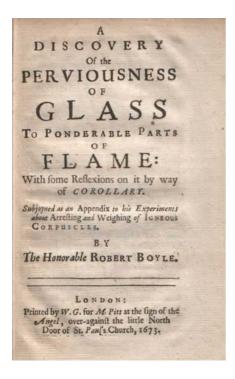
- 1. What do you understand by the terms *archive*, *manuscript*, *biography* and *antiquarian*? Check the words in a detailed dictionary and copy the definitions.
- 2. Why would antiquarians be interested in archives?
- 3. Why are archives important to modern historians writing biographies of historical figures?
- 4. Are there any 21st-century individuals whose archives might be considered important by historians in the future?

Task

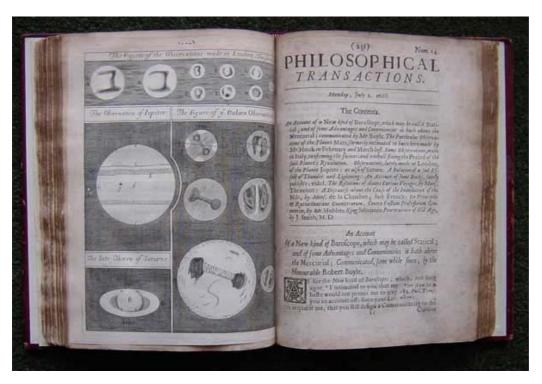
Produce a colourful poster about how to do research on the life of Robert Boyle. At the centre of the poster write *How to do Research on Robert Boyle* or *If you want to find things out about Robert Boyle*, *you can use these sources*. Ensure you include lots of pictures. You do not have to draw them accurately – or, you may wish to cut them out of the sources worksheet for this lesson and stick them onto your poster. Include some text about what each item is eg picture of the Royal Society with a caption 'Robert Boyle's manuscripts are kept here. Historians can visit to find out information on Boyle'.

The Writings of Robert Boyle: Sources

Source One: the title page of Robert Boyle's pamphlet *A Discovery of the Perviousness of Glass*. This formed part of one of Boyle's publications in the early 1670s in which he dealt with a wide range of topics in a single volume.



Source Two: a photo of the title page of an issue of the journal *Philosophical Transactions* in which Robert Boyle published some of his scientific findings. The first scientific journal, inaugurated by Henry Oldenburg, secretary of the Royal Society, in 1665 (© The Royal Society).



Source Three: a modern photograph of The Royal Society, London



Source Four: A list of unpublished writings by Boyle, dated 3 July 1691, from the Boyle archive (Boyle Papers 36, fol. 72 © The Royal Society)

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Source Five: a title page from Thomas Birch's edition of Boyle's works, including his life of Boyle published in 1744 (© The Royal Society).

