Objectives

• To develop understanding of why it is helpful to have a shared system of classification.

Resources

Images and/or video clip of woodlice (source online); live woodlice - one between two in a pot with a magnifier; photocopiable page 'Woodlouse identification guide' from the CD-ROM; media resource 'Woodlouse identification guide' on the CD-ROM

Speaking scientifically

binomial, Carl Linnaeus (pronounced Lin-ay-us) classification system, two-part naming, scientist

Lesson 2: Carl Linnaeus

Introduction

Show the children a woodlouse using a visualizer and/or use a video clip of a woodlouse and ask them what it is called. The children may have other names for the woodlouse. Explain that there are many different regional names for a woodlouse including pill bug, roly poly, cheese log, chuckypig and chiselpig. Collect all the different names that are used by children in the class.

Show the children photographs of two different kinds of woodlouse (for example, Common woodlouse (Oniscus asellus) and Common striped woodlouse (Philoscia muscorum)). Ask them to discuss in pairs what differences they can find between them. Invite pairs to share their observations with the class. Then ask the children to identify similarities between them. Ask: Did you find it easier to find similarities or differences? Note the importance of careful observation and attention to detail in science.

Whole-class work

- 1. Explain that there are also different kinds of woodlice 45 different kinds in the UK! Scientists need to be sure they are also talking about the same living things so they can share information.
- 2. Tell the children that scientists use a system of giving living things names in Latin with two parts – a more general name and a specific name. Often this name is just the common name translated. For example the wild dog rose is Rosa canina.

Paired work

3. Challenge the children to use the photocopiable page 'Woodlouse identification guide' from the CD-ROM to find out which kind of woodlouse they have in their pot. Alternatively, use the media resource 'Woodlouse identifiction guide' on the CD-ROM for a more visual approach. Other identification guides with illustrations of woodlice, such as the one by the Field Studies Council could also be used.

Whole-class work

- 4. The common woodlouse that rolls itself up has the name Armadillium vulgare. Invite the children to wonder why it got that name. (Vulgare is the Latin for 'common' and perhaps it looks a bit like an armadillo?)
- **5.** Explain that living things are not in exactly the same groups that they were originally, as scientists have found new ways of looking at the detail of animals to compare them. Look together for examples of recently discovered new species and the challenges to classification they present. (The ARKIVE website www.arkive.org is one possible source of information on new species.) However, the principle of using evidence to group living things remains a powerful legacy from Linnaeus.

Science in the wider world

Linnaeus was the first person to formally classify humans, Homo sapiens, in the same way as other animals. This can be seen as a first step towards the theory of evolution. He was a religious man whose father was a rector, but the church was strongly critical of the idea of humans being grouped with all other living things in this way as they saw humans as separate from other animals.

Review

Do the children demonstrate an understanding of why it is helpful to have a shared system of classification? Can they explain how to use the guide as a secondary source to identify their species of woodlouse?