# Box 3.1: Academic word list

#### Science: electricity

(original text from Wikipedia http://en.wikipedia.org/wiki/Electricity)

Electricity is a general term that encompasses a variety of phenomena resulting from the presence and flow of electric charge. These include many easily recognisable phenomena, such as lightning and static electricity, but in addition, less familiar concepts, such as the electromagnetic field and electromagnetic induction.

In general usage, the word 'electricity' is adequate to refer to a number of physical effects. In scientific usage, however, the term is vague, and these related, but distinct, concepts are better identified by more precise terms:

Electric charge – a property of some subatomic particles, which determines their electromagnetic interactions. Electrically charged matter is influenced by, and produces, electromagnetic fields.

Electric current – a movement or flow of electrically charged particles, typically measured in amperes.

Electric field – an influence produced by an electric charge on other charges in its vicinity.

Electric potential – the capacity of an electric field to do work on an electric charge, typically measured in volts.

Electromagnetism – a fundamental interaction between the magnetic field and the presence and motion of an electric charge.

#### Gapped text produced at level 4

## Words to complete the gaps:

identified distinct adequate concepts potential interaction interactions physical Electricity is a general term that encompasses a variety of phenomena resulting from the presence and flow of electric charge. These include many easily recognisable phenomena, such as lightning and static electricity, but in addition, less familiar 1...... such as the electromagnetic field and electromagnetic induction. In general usage, the word 'electricity' is 2 ...... to refer to a number of 3 ...... effects. In scientific usage, however, the term is vague, and these related, but 4 ......, concepts are better 5 ...... by more precise terms: Electric charge – a property of some subatomic particles, which determines their electromagnetic 6 ...... Electrically charged matter is influenced by, and produces, electromagnetic fields. Electric current – a movement or flow of electrically charged particles, typically measured in amperes. *Electric field* – an influence produced by an electric charge on other charges in its vicinity. Electric 7 ..... – the capacity of an electric field to do work on an electric charge, typically measured in volts. Electromagnetism – a fundamental 8 ...... between the magnetic field and the presence and motion of an electric charge.

### Words omitted at level 10:

adequate capacity concepts distinct fundamental identified induction interaction interactions phenomena physical potential precise