

## KS3 Unit 7 Lesson 2 The Language of Science

## **Crib Sheet**

**Slides 1 and 2** introduce the lesson objectives

- Investigate prefixes in science
- Look at words from biology
- Look at words from physics
- Look at words from chemistry
- Explore the etymology of scientific words

**Slide 3** asks pupils to think back to previous WoLLoW lessons to consider prefixes, suffixes, affixes and roots. Prefix = added before the stem of the word to give a new meaning. Suffix = added after the stem of the word to give a new meaning. Affix = added (anywhere) to the stem of the word to give a new meaning. Root = the core word that cannot be reduced down to smaller parts that have meaning.

**Slide 4** looks at the origins of the words biology, chemistry, physics and science. For interest and information. **Slide 5** asks pupils to complete the spider diagram on their worksheet by thinking of words linked to the four key terms in the middle.

**Slide 6** look at prefixes and asks pupils to categorise the words on the board into groups. There are 6 group based on the six different prefixes.

**Slide 7** looks at these 6 prefixes in more detail. Pupils have to fill in the gaps showing they understand the meaning of each prefix. The meanings are provided in red at the bottom of the slide. **Slide 8** gives the answers.

Endo - internal/ within

In - the opposite meaning

Exo - external / outside / beyond

Anti - against / opposite

Bio - involving life / living organisms

De – removal of something / off

Pupils think of their own examples of words beginning with these prefixes and fill them in on their worksheet.

**Slide 9** offers pupils the opportunity to discuss the linguistic questions about biology.

**Slide 10** is a matching exercise to see if pupils can see the links between the origin of the word and the word used today.

- 1. Vibration d
- 2. Audible a
- 3. Amplitude i
- 4. Reflection c
- 5. Refraction g
- 6. Luminous b
- 7. Gravity e
- 8. Thermal f
- 9. Kinetic h

**Slide 11** requires pupils to look at the linguistic clues provided on the right to help them fill in the vowels to the elements on the left. Calcium, potassium, helium, hydrogen, oxygen, chlorine, carbon.

**Slides 12, 13 and 14** finish the lesson with a reflective exercise about why it is useful/important to understand how to break down words to look for meaning and how understanding etymology helps comprehension, confidence and retention.