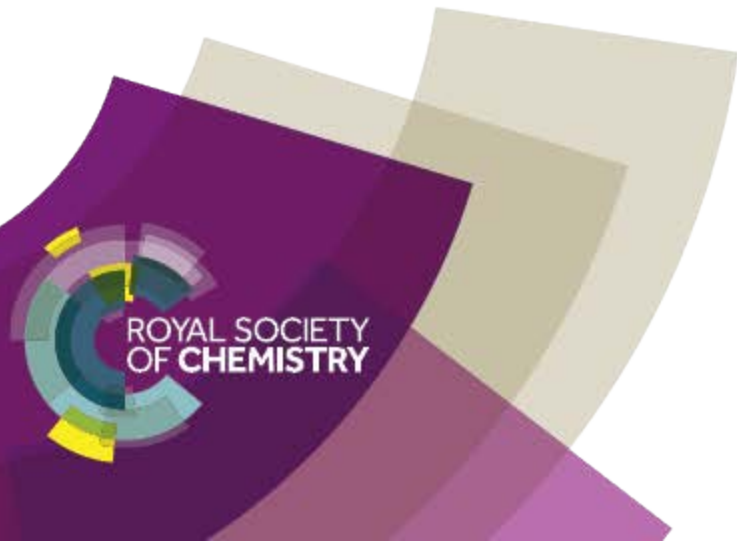


Teaching challenging vocabulary

Use these example Frayer models to explore, explain and consolidate new terms with your students



1. Explore your key term

- Find out what your students know about the word already.

2. Explore the key term further

- Show the links between words and their composite parts.

Select your key term

4. Consolidate the word

- Get students using the word in sentences.

3. Explain what the word means

- Introduce the correct definition that students will need for their exams/assessments.

1. What does the word reflection mean to you? Where have you come across this word before?

2. Looking more into the word reflect

Etymology
Flect = genuflect = deflect

Reflection

4. Write an explanation of why you can see yourself in a mirror. You should use the idea of reflection in your answer.

3. The definition of reflection and ray diagram to show this.

**1. What does the word transmission mean to you?
Where have you come across this word before?**

2. Looking more into the word transmission

Etymology

Trans = transatlantic mission – going somewhere

Transmission

**4. Now give two examples of where
light is transmitted. They could be
examples from school at home or in one of your hobbies.**

3. The definition of transmission.

1. What is a lens?

Where have you come across this word before?

2. Looking more into the word lens

Can you think of any words which contain the word letters 'len'?

Lens

4. Now draw a simple ray diagram to show how a lens works.

3. Describe in your own words what a lens is and what it does.

**Incidence/
Incident**

2. Looking more into the word incident

Can you think of any words which have the same meaning as incident?

Etymology

1. Where have you come across the word incident before? What does it mean to you? Can you use the word incident in a sentence?

4. Which of the following is the correct use of the words incident and incidence?

The angle of incidence is equal to the angle of reflection.

There was an incident on the roads when someone got injured.

The light beam is incident to the mirror.

3. What does incident mean in physics? Let's draw a simple ray diagram to show the incident beam.

**1. What does the word conservation mean to you?
Where have you come across this word before?**

2. Definition of the word conservation.

**Can you think of any words which are similar to
conservation?
Conserve = jam**

Conservation

**4. Which of the following are correct
uses of the words conservation
and conserve?**

**3. Draw a simple diagram(s)
to describe the word 'conservation'
AND 'conservation of mass'.**

We need to conserve the rainforests as they provide habitats for thousands of species.

York Minster is currently being conserved because the old brick are being replaced.

In a chemical reaction mass is not lost or gained – it remains the same and is conserved.

I had a conservation with my friends at lunch about the football at the weekend.

**1. What does the word displacement mean to you?
Where have you come across this word before?**

2. Explore displacement.

Dis and placement.

Can you think of any similar words to displacement?

Displacement

**4. Can you explain why this is a
displacement reaction?**

Calcium + copper chloride → calcium chloride + copper

3. Definition of displacement.

1. What does the word extraction mean to you? Where have you come across this word before?

2. Explore extraction.

Ex and traction

**Can you think of any synonyms for extraction?
What is the opposite of extraction?**

Extraction

4. Describe the process of extracting a metal from its ore.

You should include a word equation as part of your answer.

3. Definition of extraction.

1. What does the word formula mean to you? Where have you come across this word before? Can you think of any words containing the letters 'form'?

2. Explore formula.
The meaning of 'form'

Formula

4. From the list below, circle/highlight the formulas.

CaO

Carbon dioxide

Water

CO

LiF

Magnesium chloride

3. What is a formula in chemistry?