# Literacy in Science



# **Reading Aims:**

- Students know and understand key scientific vocabulary and are confident in using it correctly and in context.
- Students are able to extract the necessary information and examiner commands from exam questions, and know how to structure answers appropriately.
- Students are able to use different media to research a topic, applying critical thinking to the content and sources to form a judgment on the validity of stated conclusions.
- To aid comprehension of texts.

## Strategies\*:

- To support students in learning and using scientific vocabulary.
  - Key vocabulary is clearly identified and defined in lesson materials.
  - Key vocabulary common across topics is displayed in classrooms.
  - Questions testing recall of key vocabulary are regularly used in silent starters.
- Students are able to extract the necessary information and examiner commands from exam questions, and know how to structure answers appropriately.
  - Students have access to list of exam board command words with definitions.
  - Exam standard questions are used within lessons.
  - Walking talking mocks are used during revision periods.
- Students are able to use different media to research a topic, applying critical thinking to the content and sources to form a judgment on the validity of stated conclusions.
  - Students are set research topics as homework and are taught to include multiple referenced sources (esp. at Key Stage 4/5).
  - News articles are used where appropriate in lesson materials as a prompt for critical thinking.
  - Thinking hats exercises encourage different ways of looking at sources of information PSHE (whole school) encourages students to be critical users of information from the internet.
- To aid comprehension of texts.
  - Use thinking hard strategies when engaging in longer text.
  - Encourage the construction of a key word glossary throughout course.
  - Encourage reading for pleasure outside of lessons through homework
  - Activate prior knowledge
  - Etymology and Morphology

<sup>\*</sup> The list of strategies given is a selection of some of the strategies that are used throughout the department. Teachers are not obligated to use all strategies listed.

# Literacy in Science



#### **Writing Aims:**

- To ensure students are equipped with strategies to construct their answers.
- To ensure that students understand how 'long answer' questions are marked to help facilitate their writing.
- To ensure that students include the key scientific terminology in their answers to maximise their marks.
- To support the students in having the confidence in answering 6 mark questions so that they don't leave them out.

# Strategies\*:

- To support students in constructing/structuring their answers.
  - Use of sentence starters
  - Use of word banks
  - Activating prior knowledge
  - Support students with their understanding of command words in a question
  - Include exam technique lessons into schemes of work
  - modelling high scoring QWC answers
- To ensure that students understand how 'long answer' questions are marked to help facilitate their writing.
  - Regularly self and peer mark practice questions in lessons, with the mark scheme as a reference so that it becomes familiar.
  - Mark practice questions and provide personal feedback.
- To ensure that students include the key scientific terminology in their answers to maximise their marks.
  - Regularly revise key words and terminology in starters and plenaries so that the students are confident in their meaning.
- To support the students in having the confidence in answering 6 mark questions so that they don't leave them out.
  - Teach subject-specific spellings and respond to common spelling errors.
  - Model the use of connectives in linking key ideas to create a logical flow.
  - Expose students to a variety of longer questions and embed this into lessons so that it becomes less daunting.

<sup>\*</sup> The list of strategies given is a selection of some of the strategies that are used throughout the department. Teachers are not obligated to use all strategies listed.

# **Literacy in Science**



#### **Spoken Language Aims:**

- To ensure students are equipped to use a range of vocabulary as well as subject specific vocabulary using the English language
- To ensure students are equipped with the skills to structure a coherent argument and/or presentation
- To teach students how to listen and respond appropriately
- To provide students with opportunities for structured talk

### Strategies\*:

- To ensure students are equipped to use a range of vocabulary as well as subject specific vocabulary using the English language.
  - Model a range of vocabulary in teacher's own speech
  - Explicitly teach new vocabulary
  - Encourage students to use scientific vocabulary
  - Use of our 'keywords slides' in all lesson presentations
  - Use of peer-feedback during lesson tasks.
- To ensure students are equipped with the skills to structure a coherent argument and/or presentation:
  - Teach and model effective presentation skills
  - Teach and model how to express opinions around more sensitive topics in a respectful manner
  - Use of peer-feedback using agreed and specific class aims and criteria.
- To teach students how to listen and respond appropriately
  - Give opportunities for students to practise listening for specific or key information
  - Frequently use verbal questioning and encourage all students to engage
  - When using videos or audio material, using questions to check listening.
- To provide students with opportunities for structured talk
  - Use questioning to enable students to clarify, support or develop their ideas
  - Provide scaffolds
  - Plan for activities in lessons to give students opportunity to talk and discuss ideas.