## **Literacy in Maths**



### **Reading Aims:**

- To ensure students are equipped to understand command words in questions
- To ensure students are equipped with a range of independent reading strategies to aid comprehension when reading
- To support students in understanding mathematical vocabulary that they encounter in their reading
- To discern the correct mathematical strategy from the question
- To provide students with a variety of high-quality examples of written mathematics.

#### Strategies\*:

- 1) To support understanding of exam questions:
  - Encourage students to independently highlight the key words in the question
  - Teach students to identify and extract the crucial information from the question
  - Ensure that students are aware of command words in maths (e.g. in low stakes quiz questions)
- 2) To aid comprehension of texts:
  - Read the full question (RTFQ)
  - Activate prior knowledge
  - Use questioning
  - Encourage pupils to identify areas of uncertainty and seek information for clarification
  - Using subject specific vocabulary in lessons
  - Clarifying
  - Frayer Model (non-examples website)
  - Etymology and Morphology
  - Vocabulary as a starter
- 3) Model how to read mathematics
  - Regular use of worded questions
  - Model solutions provided
  - Discussion of key words and information

<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.

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## Writing aims:

- To ensure students are equipped with strategies to construct their answers
- To ensure students are equipped with a range of key words to enable them to answer the questions appropriately.
- To equip students with strategies to review their writing.

## Strategies\*:

#### 1) To support students in constructing/structuring their answers:

- Encourage students to use the TAL elements of PETAL when appropriate
  - Technique identify the mathematical techniques and methods that will aid in answering the question
  - o Analysis conduct the analysis by completing the correct maths
  - o Look-back has the analysis answered the question
- Identify key words which are expected to be seen in answers
- Use of word banks

#### 2) To support students in reflecting on their work:

- Encourage students to review the question and ensure the question has been answered appropriately
- Encourage student to highlight key words that are critical for specific questions.
- Use of peer/self-assessment

#### 3) To enable students to write fluently:

- Teach subject-specific spellings and respond to common spelling errors
- Mark written responses for SPAG as per the marking policy

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# **Literacy in Maths**



## **Spoken Language Aims:**

- To ensure students are equipped to use a range of vocabulary as well as subject specific vocabulary in their spoken language
- To ensure students are equipped with the skills to verbally explain their mathematical workings
- To support students to use spoken Standard English.
- To teach students how to listen and respond formally

#### **Strategies\*:**

# 1) To support students in using a range of vocabulary as well as subject specific vocabulary

- Model a range of vocabulary in teacher's own speech
- Explicitly teach new vocabulary
- Encourage students to answer questions using the correct mathematical vocabulary
- Use of key words at the start of a new unit/chapter

#### 2) To support verbal explanation of mathematical workings:

- Ensure students are equipped with the key words and their appropriate use
- Encourage students to explain their workings

#### 3) To support students in using Standard English:

- Model spoken Standard English
- Correct inaccuracies in spoken Standard English

#### 4) To support students in listening and responding formally

- Give opportunities for students to practise listening for specific or key information
- Frequently use verbal questioning and encourage all students to engage

<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.