SCIENCE DICE
Teacher Guide

Science DICE

practise vocabulary

build knowledge

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A Primary Science Teaching Trust Resource

Primary Science
Teaching Trust

OVERVIEW

Science Dice provide an engaging hands-on approach to supporting children to develop their scientific vocabulary and use it with understanding. The resource consists of sets of topic-related, age-appropriate scientific vocabulary that are designed to be used with 12cm sided foam dice with clear window pockets. Each vocabulary set consists of an A4 page of six words which, when cut into separate cards, can be inserted into the pockets on one dice.

HOW TO USE SCIENCE DICE

◆ Use at the start of the topic to identify words the children know and words they are yet to learn
◆ Use throughout a topic to track the children's learning and inform the next steps for planning in the topic
◆ Use at the end of a topic to show children's progress
◆ Support children to recall prior learning and make connections across different topics by mixing and matching cards from previous topics

CHOOSING THE WORDS

It is recommended that teachers select the set of words (or a mixture of different sets of words) that best supports the intended learning for their children. Strategies for using the dice:

◆ Make up identical dice and give one to each group of children so that the whole class has *the same set* of six words in their dice
◆ Make up different dice and give one to each group of children so that each group has *a different set* of six words in each dice; the dice can then be rotated between the groups
◆ Give each group of children more than one dice, each with a different set of words

AGE CATEGORIES

The vocabulary sets have been created for four different age groups, categorised as follows:

◆ Early years (3-5)
◆ Lower Primary (5-7)
◆ Middle Primary (7-9)
◆ Upper Primary (9-12)

Please note that the age ranges given are based on approximate age-appropriateness to align with UK science curricula, but teachers may choose to select sets from a younger or older age range, depending on the children's needs and reading levels; where possible, images have been included with the words for Early Years and Lower Primary. When the dice are being used for retrieval of past learning, it may be beneficial to select sets from younger age categories.

SCIENCE DICE STRATEGIES FOR DIFFERENT AGE GROUPS

EARLY YEARS (3-5)

To prompt recall of vocabulary, ask the children to:

◆ Say the word 5 times.
◆ Mime the word.
◆ Use the word in a sentence.
◆ Draw a picture that reminds them of the word.

LOWER PRIMARY (5-7)

To prompt recall of vocabulary, ask the children to:

◆ Say the word 5 times.
◆ Mime the word.
◆ Define the word.
◆ Use the word in a sentence.
◆ Draw a picture that reminds them of the word.
◆ Think of another word it rhymes with.
◆ Break the word into syllables and practise saying them out loud. If helpful the children could think of rhyming words for the syllables, e.g. to help recall 'opaque' they might think of 'no cake'.
◆ Choose the most challenging word to remember and display it on the wall as a prompt for regular reminders.

SCIENCE DICE STRATEGIES FOR DIFFERENT AGE GROUPS

MIDDLE PRIMARY (7-9)

To prompt recall of vocabulary, ask the children to:

◆ Say the word 5 times.
◆ Define the word.
◆ Use the word in a sentence.
◆ Think of another word it rhymes with.
◆ Explain how they will remember the word.
◆ Break the word into syllables and practise saying them out loud. If helpful the children could think of rhyming words for the syllables, e.g. to help recall 'opaque' they might think of 'no cake'.
◆ Choose the two most challenging words to remember and display them on the wall as a prompt for regular reminders.
◆ Create and display a science glossary for a topic by writing key words and definitions.
◆ Keep a 'science words' notebook (individually or as a group) and prompt the children to revisit their words regularly.

UPPER PRIMARY (9-12)

To prompt recall of vocabulary, ask the children to:

◆ Define the word.
◆ Use the word in a sentence.
◆ Think of a word or words that rhyme with it.
◆ Think of another word related to the word and explain why.
◆ Explain how they will remember the word.
◆ Choose the most challenging words to remember, spell or use with understanding and display them on the wall as a prompt for regular reminders.
◆ Create and display a science glossary for a topic by writing key words and definitions.
◆ Keep a 'science words' notebook (individually or as a group) and prompt the children to revisit their words regularly.
◆ Spot the word being used by other people, e.g. in books, on TV or in conversations.
◆ Make up a mini quiz for their peers to do.

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