Are mushrooms plants?

AGE RANGE: 5-7 years

OVERVIEW
Pupils are involved in an observational enquiry to investigate a variety of plants. They are introduced to mushrooms, addressing the common misconception that mushrooms are plants. Pupils ask questions about how plants and mushrooms are similar and different, developing simple understandings of fungi. By learning that mushrooms are not plants, they deepen their understanding and consolidate their knowledge of what a plant is, and will be able to reason why.

LEARNING OBJECTIVES
- To use knowledge of plant structures to begin to identify the difference between plants and fungi, including mushrooms
- To explore and compare the difference between things that are living, dead and things that have never been alive

WORKING SCIENTIFICALLY FOCUS
- To closely observe the range and variety of mushrooms
- To identify, compare, contrast and classify different types of mushrooms

RESOURCES
FOR EACH GROUP
- a variety of mushrooms sourced from local supermarkets, e.g. button, flat, shiitake, oyster, white, chestnut
- a variety of plants - flowering and non-flowering, e.g. vegetables, grasses, ferns, daisies
- magnifying glasses / lenses (or a digital microscope if available)

KEYWORDS
- living things, alive, once alive, never alive
- parts and structure of plants: leaves, flowers, petals, stem, roots, seeds
- water, light, growth
- observe, identify, sort, group
- similarities, differences
Using a variety of flowering and non-flowering plants, engage the pupils in grouping the plants in different ways based on their structures. Encourage them to discuss, identify and describe the structures, including leaves, flowers, petals, stem, roots, seeds etc.

Introduce a mushroom to the group and challenge the pupils to consider whether this is part of the family of plants. Pupils could take part in a class vote. Ensure you probe so that they can explain their reasoning, to allow you to elicit any misconceptions.

Watch the Video Clip 1 and Video Clip 2, which show James, The Linnean Society’s fungus expert, explaining what mushrooms are and the different types. Pupils should recall key words and phrases that James uses to describe mushrooms. How does this compare to what they knew already? What is James explaining that is new to them?

Encourage pupils to investigate the question Are mushrooms plants? by closely observing a variety of mushrooms sourced from local supermarkets, e.g. button, flat, shiitake, oyster, white, chestnut. Use equipment such as magnifying glasses/lenses (and digital microscopes if available) to encourage close observation. Pupils to jot down or draw as many common features of mushrooms they can find. They may consider colours, textures, structures. You may wish to use the Question Frame to encourage pupils' questions.

Use the sentence starters such as, 'They've all got...'; 'Some have got...'. At this stage encourage pupils to look for similarities and differences between the mushrooms and the plants. Ask the pupils whether they have any other questions. Use the GSSFS Question Frame if appropriate.

The GSSFS Conclusion Creator will enable pupils to develop conclusions to answer the scientific question: Are mushrooms plants? Reinforce the vocabulary around structure and functions of plants.

Provide time for pupils to share their investigation and conclusions with new audiences. They could:
- produce observational drawings or art work of the mushrooms and plants
- produce mushroom prints
- write an acrostic poem
- share their findings about mushrooms to older children who are learning about plants
- Tweet @GreatSciShare #GSSFS2023