



St James' Church of England Primary School

Science Overview Sheet



Year 2 – Use of everyday materials



Rationale: Pupils should identify and discuss the uses of different everyday materials so that they become familiar with how some materials are used for more than one thing (metal can be used for coins, cans, cars and table legs; wood can be used for matches, floors, and telegraph poles) or different materials are used for the same thing (spoons can be made from plastic, wood, metal, but not normally from glass). They should think about the properties of materials that make them suitable or unsuitable for particular purposes and they should be encouraged to think about unusual and creative uses for everyday materials. Pupils might find out about people who have developed useful new materials; for example, John Dunlop, Charles Macintosh or John McAdam.

Pre-unit task: Knowledge Organiser Quizzes

Working Scientifically:

- *Comparing the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs).*
- *Observing closely.*
- *Identifying and classifying the uses of different materials, and*
- *Recording their observations.*
- *Thinking about unusual and creative uses for everyday materials.*

Statutory Requirements:

- **Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.**
- **Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.**

Some materials can be found naturally; others have to be made.

Overview:

Lesson 1: Identifying Uses - I can identify uses of different everyday materials.
Lesson 2: Out and About - I can identify and group the uses of everyday materials.
Lesson 3: Comparing Suitability - I can compare the suitability of different everyday materials.
Lesson 4: Changing Shape - I can explain how the shapes of objects made from some materials can be changed.
Lesson 5: Recycling - I can explain the process of recycling.
Lesson 6: Discovering New Materials - I can tell you about the inventor John McAdam

Cross Curricular Links

Resources

- pencils • clipboard per pair • cameras/tablets (if available)
- Objects to be manipulated: play dough, pipe cleaners, tea towels, socks, drink can, elastic bands, drinking straws and sponges. • Scissors glue

Assessment

Most Children will: • Identify and name everyday materials. • Identify different uses of everyday materials. • Record their observations. • Demonstrate and explain how shapes of objects made from some materials can be changed. • Explain what recycling means.

Less Able Children will: • Compare the uses of different everyday materials. • Compare the suitability of different everyday materials. • Explain the basic progress of recycling. • Explain the advantages of recycling.

More Able Children will: • Classify the uses of different everyday materials. • Compare and explain the suitability of everyday materials in different circumstances. • Use their observations, ideas and experiences to ask and answer simple questions. • Suggest reasons for specific outcomes. • Explain how recycling impacts positively on the environment. • Explain how the inventions and discoveries of others have impacted on our lives today.