Science Overview – Materials

Year Two

Spring Term

Key Question: What makes a superhero?

National Curriculum

- 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.

SUBSTANTIVE KNOWLEDGE

1) Know what materials objects are made from.
2) Describe the properties of materials.
3) Know that some materials are more suitable for a specific purpose than others based on their properties.
4) Know that some materials are found naturally and others are man-made.
5) Identify natural and man-made materials.
6) Know the names of some scientists who have invented new materials (John McAdam, John Dunlop and Charles Macintosh).
7) Know that some materials can be changed by squashing, bending, twisting and stretching.

Key Vocabulary	materials, suitability, properties, natural, man-made
Previous year groups key vocabulary:	object, material, hard, soft, stretchy, shiny, dull, rough, smooth, bendy, not bendy, waterproof, not waterproof, absorbent, not absorbent, transparent, opague.
Disciplinary Concepts	• Observing closely using simple equipment. • Using their observations and ideas to suggest answers to questions. • asking simple questions and recognising that they can be answered in different ways
Enquiry type to cover and enquiry suggestion	**Identifying, grouping and classifying (enquiry type)** Chn may group objects into simple categories (e.g. – man-made and natural) They will be able to verbally explain what the difference is and begin to use simple scientific words with support to explain why one group is different to another. **Research using secondary sources (enquiry type)** How is plastic/glass made?
Learning Milestones /Assessment	I can… • Identify the material different objects are made from. • Suggest a suitable material for an object. • identify some natural and man-made materials. • Give reasons why certain materials would be suitable for a particular job. • Name materials that can be stretched, bent, squashed and twisted.