

Topic Name	Materials – Once Upon A Time/ Toys
Big Question	Which materials should the Three Little Pigs have built their house from?
Scientists to use as examples	William Addis, Charles Mackintosh, John MacAdam, Chester Greenwood
Key Knowledge	<p>distinguish between an object and the material from which it is made ☒ identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock ☒ describe the simple physical properties of a variety of everyday materials ☒ compare and group together a variety of everyday materials on the basis of the physical properties</p> <p>Pupils should explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties such as: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent. Pupils should explore and experiment with a wide variety of materials, not only those listed in the programme of study, but including for example: brick, paper, fabrics, elastic, foil.</p>
Key investigational skills	<p>Pupils might work scientifically by: performing simple tests to explore questions, for example: ‘What is the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast’s leotard?’</p> <p>Answer yes and no questions about objects and materials to aid sorting.</p> <p>To ask questions about what something is made from and it’s properties.</p> <p>Ask a question about what might happen in the future based on observations. (car and ramp experiment)</p> <p>To compare objects based on properties of materials.</p> <p>Make observations linked to answering the question.</p> <p>Dental health experiment- to observe changes in the outside shell of an egg in different liquids.</p> <p>Toy car- experiment to see which surface the car travels on fastest.</p> <p>3 little Pigs- to build houses for the pigs using a range of materials.</p> <p>Gingerbread man- to build a way for the gingerbread man to cross the river.</p> <p>Sort toys using their properties.</p> <p>To answer questions in a simple sentence about dental health experiment using our observations. To answer questions about the best materials to use to build a strong house.</p> <p>To record data from toy car experiment in simple tables, pictorially or by taking photos</p>

Vocabulary	Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through
Prior learning – what children should know	Use all their senses in hands-on exploration of natural materials. (Nursery - Materials, including changing materials) • Explore collections of materials with similar and/or different properties. (Nursery - Materials, including changing materials) • Talk about the differences between materials and changes they notice. (Nursery - Materials, including changing materials)
Future learning – next time they will be learning	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Y2 - Uses of everyday materials) • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (Y2 - Uses of everyday materials)
Visits	Builder/ Carpenter
Book links	Let's build a house – Mick Manning and Brita Granstrom Stanley's Stick Stick Man