PENTECOST TERM 2 SCIENCE – Year 2 - Medium Term Planning – CHEMISTRY: USES OF EVERYDAY MATERIALS		
LESSON 1	**LESSON 2**	**LESSON 3**
LEARNING INTENTION: To know that objects are made from different materials. **Disciplinary Knowledge:** • Identify and classify things they observe. **Aim:** Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.	**LEARNING INTENTION:** To know that a property is a quality that a material has. **Disciplinary Knowledge:** • Identify and classify things they observe. **Aim:** Develop scientific knowledge and conceptual understanding through the specific disciplines of chemistry.	**LEARNING INTENTION:** To know that properties make materials more suitable than others for a purpose. **Disciplinary Knowledge:** • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. **Aim:** Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.
Key Vocabulary: **material, everyday,** object, **metal, wood**, **glass, plastic**, rubber, **paper, cardboard**, **brick, rock**	**Key Vocabulary:** **property, hard, soft, stretchy, strong, waterproof**, absorbent**, bendy, rough, smooth,** opaque, transparent	**Key Vocabulary:** **properties, purpose, material**
Recap & retrieval	**Recap & retrieval** • There are many everyday materials.	**Recap & retrieval** • There are many everyday materials. • Materials can have several properties.
Key Knowledge:	**Key Knowledge:**	**Key Knowledge:**

Child: • Materials are what things are made from. • There are many everyday materials. **Teacher:** • Objects can be sorted according to their materials and their properties. • Wood is used to make furniture. • Metal can be used to make coins, cans, cars and cutlery. • Glass is used to make windows.	**Child:** • Materials can have several properties. • Materials are used for different purposes based on their properties. **Teacher:** • Some objects can be made from a range of different materials. • Some materials are not suitable due to their properties. • Wood is strong, flexible and long lasting. It comes from trees. • Wood is lighter than bricks so it is quicker to build the house, but some people think that brick houses will last longer. • Metal is found inside rocks. It is strong, hard and shiny. • Glass is transparent, fragile and hard. It is made from molten sand. • Paper is lightweight and flexible. It is made from wood. • Plastic is made from oil. It is waterproof, strong and can be transparent.	**Child:** • Different materials can be used to make the same object and this may change the purpose of the object. **Teacher:** • A material's physical properties make it suitable for particular purposes, such as glass for windows and brick for building walls.

PENTECOST TERM 2
SCIENCE – Year 2 - Medium Term Planning – CHEMISTRY: USES OF EVERYDAY MATERIALS

LESSON 4	LESSON 5	LESSON 6
LEARNING INTENTION: To know that the shapes of some materials can be changed. **Disciplinary Knowledge:** • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. **Aim:** Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.	**LEARNING INTENTION:** To know that paper can be tested for strength, texture and absorbency. **Disciplinary Knowledge:** • Perform simple tests. • Observe closely using simple equipment. • Gather and record data to help in answering questions. **Aim:** Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.	**LEARNING INTENTION:** To know that some materials can be recycled. **Disciplinary Knowledge:** • Ask simple questions and recognise that they can be answered in different ways. • Use their observations and ideas to suggest answers to questions. **Aim:** Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.
Key Vocabulary: material**, shaped, bend, twist, stretch, squash, twist**	**Key Vocabulary:** **paper**, **absorbent**, **strength, texture, absorbency,** smooth, bendy, rough, opaque	**Key Vocabulary:** **recycle, reduce, re-use**, waste, pollution, product
Recap & retrieval • There are many everyday materials. • Materials can have several properties.	**Recap & retrieval** • There are many everyday materials. • Materials can have several properties. • Different materials can be used to make the same object and this may change the purpose of the object.	**Recap & retrieval** • There are many everyday materials. • Materials can have several properties.

• Different materials can be used to make the same object and this may change the purpose of the object.	• Materials can be shaped by bending, stretching, twisting and squashing.	• Different materials can be used to make the same object and this may change the purpose of the object. • Materials can be shaped by bending, stretching, twisting and squashing. • There are many different types of paper. Each type has different properties and uses.
Key Knowledge: **Child:** • Materials can be shaped by bending, stretching, twisting and squashing. **Teacher:** • Things that are made from soft materials can often be squashed. • Materials like glass need to be heated to help them change shape. • Other materials don't need to be heated, they just need force. • Some materials return to the shape they were after being stretched. • We call these materials **elastic**, like rubber bands. • Squash an object by pushing both hands together. • Bend an object by grabbing both ends of the object and bringing the ends inwards together. • Twist an object by turning your hands in opposite directions.	**Key Knowledge:** **Child:** • There are many different types of paper. Each type has different properties and uses. **Teacher:** • Paper is made from wood. Trees are cut down and taken to factories called paper mills. • The wood is cut into tiny pieces and soaked in water to make a watery wood pulp. The wood pulp goes through a large machine where it is spread out, dried and turned into paper. • Printer paper is used in printers and photocopiers because it is **bendy**, which helps it to move easily through machines. People write on printer paper because it has a **smooth** surface. • Textured paper is used for artwork because its **rough** surface adds texture to paintings and stops paint from running. • Newsprint is used for newspapers. The paper is thin and **bendy** because it is often rolled or folded. Newsprint is **opaque** so that writing and pictures can be printed on both sides.	**Key Knowledge:** **Child:** • Recycling means turning old products into new ones. **Teacher:** • Recycling is when rubbish made from certain materials is collected, sorted and then put through a process to use the materials again. • This makes less waste and uses fewer of the Earth's natural resources. • There are three ways we can save the Earth's natural resources. • **Reduce** the number of objects we buy and the amount of packaging we use. • **Reuse** items like carrier bags and envelopes. • **Recycle** as much waste as possible.

• Stretch an object by pulling your hands slowly and gently apart.	• Tissue paper is thin and **bendy** and holds its shape when crushed. This makes it ideal to use in crafts. • Crêpe paper is used in crafts because it is **bendy** and **stretchy**. Its **rough** surface adds texture to artwork. • Paper towel is used for wiping and drying because it is **soft**, **bendy** and **absorbent**. • Brown paper is often used for packaging because it is **bendy**, **opaque** and **waterproof**. • Cardboard is used for packaging because it is **strong** and **not bendy**. Cardboard does not tear easily.	
Assessment Cumulative quiz. Retrieval practice.		