The Canons CE Primary School

Y1 Science – Everyday Materials

(Spring 1 – Moon Zoom)

NC Targets to be Covered:

Pupils should be taught to:

- 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 their simple physical properties.

Learning Ladders:

- I can identify and name everyday materials.
- I can recognise objects and the materials they are made from.
- I can describe the properties of everyday materials.
- I can describe the similarities and differences between everyday materials.
- I can group materials by their properties.
- I can describe why certain materials are used for certain purposes e.g. bricks and houses.

Working Scientifically

1. I can ask simple questions and recognise that they can be answered in different ways.
2. I can observe closely, using simple equipment.
3. I can perform simple tests.
4. I can identify and classify.
5. I can use my observations and ideas to suggest answers to questions.
6. I can gather and record data to help in answering questions.

Key Vocabulary

object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, rubber, card/cardboard, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through

Week	Order of Study
1	**Start of unit quiz** **LI: I can identify and name everyday materials.** **Big Question: What materials do we have on Earth?** **Type of Scientific Enquiry – Research – What materials do we have on Earth?** **Starter** – Discuss: what is a material? Can the children name any? Give children some different everyday materials to look at and touch. What do they know already? Any misconceptions? **Main lesson** – Explain that we are going to be carrying out scientific enquiry 'research'. Explore the first part of the website: https://www.bbc.co.uk/bitesize/articles/zd9w8hv Check understanding. Then look at the bottom part of the website and the PowerPoint on materials to look further at their properties (one by one, starting with metal – fabric – plastic – wood – glass). Quiz children in their groups to point to metal etc... **Task** – Children to match pictures of different materials to their names. Stick pictures in books. **Plenary** – Children to play the pairs card game, where you turn over the cards to find pairs. **Resources needed**: examples of different materials to look at and touch, pictures and names for match, PowerPoint of materials, bbc link: https://www.bbc.co.uk/bitesize/articles/zd9w8hv **Key terminology – object, material, metal, fabric, plastic, wood, glass, hard, soft, stretchy, stiff, waterproof, smooth, shiny, dull, see-through**

The Canons CE Primary School

2	**LI: I can recognise objects and the materials they are made from.** **Big Question: What materials do we have on Earth?** **Type of Scientific Enquiry – Identifying, classifying and grouping – What materials do we have on Earth?** **Starter** – Discuss: what is a material? Review: Name some everyday materials. **Main lesson** – Children to look at and explore the crash site again! They need to look closely at the objects that fell out of the rocket. Can they discover what the objects are made out of? Discuss as a class and see if they agree/disagree with each other – can the children describe the properties to prove why they are right? **Task** – Write the name of the material on the sheet. **Plenary** – Give children a material that was NOT found in the crash site. How can the children prove it was not there? (e.g. glass because nothing was see-through). **Resources needed**: worksheet, crash site set up with materials in **Key terminology – object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, rubber, card/cardboard, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through**
3	**LI: I can describe the properties of everyday materials.** **I can describe the similarities and differences between materials.** **Big Question: What materials do we have on Earth?** **Type of Scientific Enquiry – Identifying, classifying and grouping – What materials do we have on Earth?** **Starter** –Review: Name some everyday materials. **Main lesson** – Look at the PowerPoint on materials previously looked at. Explore their properties further. Keep quizzing and addressing misconceptions throughout. Look at a variety of materials. As a class, talk through different words we can use to describe them. Look at the widget vocabulary cards and their meanings. **Task** – Sort the properties/adjectives into the different materials: Metal, Wood, Glass and Plastic. **Plenary** – What is the same between ___ and __ ? What is different between __ and __ ? **Resources needed**: worksheet, PowerPoint on materials, **Key terminology – object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, rubber, card/cardboard, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through**
4	**LI: I can describe why certain materials are used for certain purposes.** **Big Question: What materials do we have on Earth?** **Type of Scientific Enquiry – Comparative and fair testing – Which material is best to make a spaceship?** **Starter** –Review: Name some everyday materials and their properties. **Main lesson** – Explain to the children that we need to choose a strong and light material to make a spaceship. Which material is best for this? Discuss how we could test which one is the strongest/lightest – we will fly them either in the hall or outside and will assess which one travels the furthest and stays in shape with least damage to the spacecraft.

The Canons CE Primary School

	Task – STEM activity where children work in groups with ONE material. Split children into 8 groups of 3 or 4. 2 groups will use the same material. Materials: - Metal – foil, foil plates, nuts and bolts - Plastic – cling film, plastic bottles, yoghurt pots - Wood – paper, toilet roll holders, cardboard - Fabric – scrap material, cotton wool **Plenary** – Which material worked best? **Resources needed**: a range of different materials for children to create a spaceship with e.g. different types of metal, different types of card/paper, different types of fabric. **Key terminology – object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, rubber, card/cardboard, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through** **End of unit quiz**