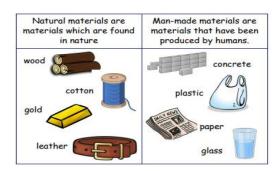


Year One Subject - Science (Everyday Materials Topic - Buckets and Spades

Key Facts Materials are things that objects are made of, such as wood, plastic, metal, and glass.

- Objects can be made of one material, or a combination
- Materials can have different properties
- Some materials are natural, like wood and cotton, while others are human-made, like plastic and metal.
- Materials can be recycled
- Different materials are used for different purposes.
- Objects can change shape or size when they are heated or cooled
- Materials can also change when they are mixed with other materials.
- Some materials are good conductors of heat and electricity, while others are not.
- It is important to use materials safely and responsibly, and to dispose of them properly when no longer needed.

Diagram/Investigations



- Sorting Materials sort a variety of everyday materials based on their properties such as hardness, texture, and flexibility.
- Sinking and Floating experiment with different materials to see which ones sink or float in water.
- Changing Materials investigate how materials change when they are heated or cooled, or when they are squashed or stretched.
- Absorbency Test test the absorbency of different materials such as paper, cloth, and sponge.
- Material Hunt go on a material hunt around the school or home and identify the different materials they find.

Key Learning:

- Identify, name and sort a variety of everyday materials
- Describe the properties of different materials, such as their colour, texture, and hardness.
- Recognise that some materials can be changed
- Investigate the suitability of different materials for different purposes, such as identifying materials that would be good for making a waterproof coat
- Explore recycling and taking care of our environment
- Recognise that some materials can be dangerous and should be handled with care
- Use scientific vocabulary to describe properties,
- Participate in hands-on activities and experiments to develop observational skills and investigate the properties of materials.
- Engage in discussions and share findings and ideas with others.

Prior Learning:

- I know about similarities and differences in objects and materials.
- I can talk about things in my own environment and know how these might be different from one another.
- I have grouped and sorted different objects and materials based on different properties.

Books to support/ Enrichment Opportunities:

https://www.bbc.co.uk/bitesize/topics/zrssgk7/resources/1 https://www.science-sparks.com/materials-scienceactivities-for-kids/

https://thehappyscientist.com/science-topics/materials https://www.childrensuniversity.manchester.ac.uk/learning-activities/science/materials-science/

https://explorify.wellcome.ac.uk/topics/everyday-materials



Subject Specific Vocabulary	
Key word	Definition
Flexible	A material that can be bent, twisted, or stretched without breaking, such as rubber or cloth.
Gas	A material that has no fixed volume or shape and can expand to fill any container, such as air.
Hazardous	A material that is dangerous or harmful to people or the environment, such as sharp objects or poisonous substances.
Investigate	To explore and discover information about materials and their properties through scientific experimentation and observation.
Liquid	A material that has a fixed volume but can change its shape, such as water or juice.
Material	Any substance that objects can be made from, such as wood, plastic, glass, metal, and rock.
Observations	The act of watching, listening, and recording information about materials and their properties using the senses, such as sight, touch, and hearing.
Opaque	Not allowing light to pass through, so objects cannot be seen clearly through the material, such as wood.
Properties	Characteristics that describe a material, such as its colour, texture, hardness, and flexibility.
Recycling	The process of turning waste materials into new products to reduce waste and conserve resources.
Solid	A material that has a fixed shape and volume, such as wood or metal.
Sort	To separate materials based on their properties or characteristics, such as sorting materials into hard and soft categories.
Transparent	Allowing light to pass through, so objects can be seen clearly through the material, such as glass.
Waterproof	A material that does not allow water to pass through, such as rubber or plastic.

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