

KS1 Science Year A

“It is the glory of God to conceal things, but the glory of kings is to search things out.” Proverbs 25:2

Uses of Everyday Materials

| Spring Term KS1 | Key Knowledge - Encompassed within knowledge mat | Key Vocabulary |
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| <p>NC Objectives</p> <p>To identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching,</p> <p>Pupils will identify and discuss the uses of different everyday materials that they become familiar with how some materials are used for more than one thing, or different materials are used for the same thing.</p> <p>Pupils will think about the properties of materials that make them suitable or unsuitable for particular purposes and will be encouraged to think about unusual and creative uses for everyday materials.</p> <p>Pupils will work scientifically by: comparing the uses of everyday materials in and around school with materials found in other places; observing closely, identifying and classifying the uses of different materials and recoding their observations.</p> | <p>Wood comes from trees, so it is a natural material that is a suitable building material.</p> <p>Plastic is a manmade material that comes from oil.</p> <p>Glass is a natural material that originally comes from sand.</p> <p>Sand is heated at a very high temperature until it becomes a liquid and then it's moulded into any shape.</p> <p>Metal is a natural material that comes from minerals in the ground.</p> <p>Bricks are made from clay and when stuck together with cement, they form a very strong structure.</p> <p>Paper and cardboard are materials that both come from trees but are produced in factories.</p> <p>The strength of a material can be changed based on the shape and structure of the material.</p> <p>Engineers design the structure of bridges to make each part strong.</p> <p>Triangles are very strong shapes, which makes them important when building strong and stable structures.</p> <p>Construction workers build bridges and houses using triangles.</p> <p>The main naturally-occurring stretchy material is rubber.</p> <p>Some clothes – like gym shirts, leggings and swimwear – are best made from stretchy materials.</p> <p>Many things have an 'elastic limit', which is a point when they will not stretch any more but just break.</p> <p>To change the shape of an object, you need to apply a force to it – a push or a pull motion.</p> <p>The shape of an object can be changed by squashing, bending, twisting, or stretching it.</p> <p>When you squash an object, you push two opposite sides towards each other, making the object flatter.</p> <p>You can bend an object by pushing two ends of a material towards each other at an angle.</p> <p>You can twist an object by pushing and pulling both ends in opposite directions.</p> <p>Stretching is where you pull two sides of an object away from each other. It's the opposite of squashing.</p> <p>The clothing a construction worker needs to wear is called Personal Protective Equipment.</p> <p>Charles Macintosh invented waterproof clothing: two sheets of fabric joined with solution and then dried.</p> <p>The word mackintosh has become the general term for any raincoat.</p> <p>John McAdam invented the macadam road surface: large rocks, smaller stones, and then fine gravel.</p> | <p>brick</p> <p>property</p> <p>material</p> <p>suitable</p> <p>object</p> <p>bridge</p> <p>construction</p> <p>obstacle</p> <p>triangle</p> <p>structure</p> <p>limit</p> <p>floppy</p> <p>elastic</p> <p>squash</p> <p>force</p> <p>twist</p> <p>bend</p> <p>stretch</p> <p>mackintosh</p> <p>waterproof</p> <p>protective</p> <p>fluorescent</p> <p>safety</p> <p>road</p> |
| <p>Spirituality question:</p> <ul style="list-style-type: none"> If you could ask a Kenyan child a question, what would it be? | | |