Science Learning Organiser – Year 2 Summer 2 – "How important is the High Street in Buckden?"

Prior Learning (What we already know?):

We have explored materials (EYFS)

We know the names of different materials (Yr1)

We can identify the material an object is made of (Yr1)

We can describe the properties of materials (Yr1)

We choose an appropriate method for testing an object for a particular property (Yr1)

We can sort and classify objects based on the material they are made of and its properties (Yr1)

We started to think about how a property of a material makes it suitable for its purpose (Yr2 Autumn 2)

New Learning:

To know materials can be used for more than one thing e.g. (metal can be used for coins, cans, cars and table legs

To know how a property of a material makes it suitable for its purpose

To know objects made of some materials can be changed in shape

New Science Skills:

To be able to test a material to see if it can change shape e.g. it can twist and not break

To be able to sort materials based on their properties

To be able to match a property to a material

To be able to choose a material for a specific purpose and explain why it's a good choice

Key Questions:

Can you list materials that can twist?

How would you show a material is bendy?

How would you test what material is best for a pair of shoes?

What is the function of an elastic band?

Vocabulary:
Shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching

Key Facts:

John Dunlop was born in 1840 and he invented a pneumatic tyre in 1888

Charles Macintosh was born in 1766 and he invented a waterproof fabric

A material is any substance that has a name

The **property** of a material is something about it that we can measure, see or feel

Most materials have more than one property and can be **natural or man-made,**

Plastic is made from oil – we now use about 20 times more plastic than we did 50 years ago.

The most common metal found on our planet is iron.

On average every UK family uses around 330 glass bottles and jars every year which can easily be recycled.

The energy saved from recycling one plastic bottle can power a 100 watt light bulb for almost an hour.

Key Resources:

https://explorify.wellcome.ac.uk/teaching-support/whats-new/explorify-at-home-properties-of-materials

https://explorify.wellcome.ac.uk/en/activities/whats-going-on/fantastic-fibres

https://explorify.wellcome.ac.uk/en/activities/odd-one-out/burly-bridges

Can I do this?

Whilst changing the shape of an object describe the action used

Use the words flexible and/or stretchy to describe materials that can be changed in shape and stiff and/or rigid for those that cannot

Recognise that a material may come in different forms which have different properties e.g. thin cardboard and thick cardboard

Test and collect data about the suitability of materials for a purpose

Explain using the key properties why a material is suitable or not suitable for a purpose

Use test evidence to select appropriate material for a purpose e.g. Which material is the best for a rain hat or for different parts of shoes?