To Learning!
Topic Title: Great Fire of London - oops it's on fire!
Year Group: 2

## Science Intent:

To observe closely, identifying and classifying the uses of different materials, and recording their observations.

## Prior Scientific Learning/Linked Topics:

To be able to distinguish between and object and the material from which it is made.

To identify and name a variety of everyday materials.
To describe the simple physical properties of everyday materials.
Compare and group a variety of everyday materials on their simple and physical properties.
Literacy Links (including texts/media
used):
Toby and The Great Fire
Magic Grandad TV episode - GfoL

Toby and The Great Fire
Magic Grandad TV episode - GfoL

## Scientific 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.
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.


## Working Scientifically

## Observing and

 Measuring over timeUse simple
measurements and equipment with increasing independence
Identifying, classifying and
grouping
Observe and identify,
compare and describe
Use simple features to
compare objects, materials
and, with help, decide how to
sort and group them.

Comparative and fair testing (controlled investigations)
Performing simple tests by predicting results first.
Recording results in a table that has been provided.
To say what happened in an investigation.
Talk about what they have found out and how they found it out.
To say what happened in an investigation.
To say whether I was surprised at

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|  |  | the results or not. <br> To say what I would change about <br> my investigation. |
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## Content:

Initial assessment to assess children's prior knowledge from Year 1. After discussion, the children will create a title page of what they already know about materials.

## Describe the simple properties of everyday materials (review of learning from Year 1). Identifying, Grouping and Classifying

The children will use adjective to describe everyday materials in a feely bag. They will independently identify objects around the classroom and describe the materials they are made from. The children will record responses for the floor book.

## - Identify and compare materials Identifying, Grouping and Classifying

Chn 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 by identifying the uses of different materials. Children to recap on the names and properties of different materials around the classroom and around the school. The children will complete a table identifying the object, material and why it is made out of this material.

- Suitability of materials

Children to identify and compare the suitability of a variety of everyday materials by exploring the purposes of different objects. In their groups, children discuss which material spoons are made from. Children to explain why different materials can be used to make the same object. Suitability: Introduce the word suitability, encouraging them to ask questions and make suggestions. Children in a table, will choose an object, say what material it is made from, its properties of material and why it is a good choice.

- Investigate how materials can be shaped Identifying, Grouping and Classifying

The children will make putty and they will then investigate how the material will change by manipulating the putty. Observations to be recorded of their responses. Children to find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching by changing the shape of objects. Children collect different objects from the classroom. Children to predict which objects they think can be bent, squashed, twisted and stretched. Children then explore the objects and record which can be bent, squashed, twisted and stretched. Were their predictions correct? Children to explain why they think some materials can be changed in this way and others cannot. Children to record their results on
to a table.

- How the shape of materials can change Comparative/ Fair Testing Problem Solving

Children to be set a problem e.g. We are visiting the monument in London and we have looked at the weather and the forecast is set for heavy rain. What should I wear?
The children are testing plastic, paper, wood, rubber, fabric etc to see which would be most suitable for their jacket to be made from. The children will make predictions as to which material they will be the most suitable. The children will come up with their own method to test the material considering how to make it a fair and reliable test. They children will write up their results and explain their findings.

## Key Vocabulary:

Identify, materials, wood, plastic, glass, metal, rock, brick, paper, cardboard,
transparent, opaque, translucent, reflective, non-reflective, flexible, rigid
push pushing pull pulling twist twisting squash squashing bend bending stretch stretching

## Stunning Start/Marvellous Middle/Fabulous Finish:

Making 2D and 3D houses to burn
Making bread rolls

## OAA/Trips/Visits/Visitors:

Fire brigade visit

