** WE ARE SCIENTISTS **

**Class:** Pears (Y1/2) **Teacher:** Mrs Gardiner **Term and Year:** Year B – Autumn Term

**PRIMARY PROVOCATION**

*Encouraging children to think deeply, ask questions, debate, have opinions and develop spiritually.*

**“FAIRYTALE CHARACTERS HAVE ALWAYS GOT IT WRONG!”**

In this topic, children will have the freedom to explore properties and changes of everyday materials alongside using the key skills of working scientifically to test concepts. We will learn about how to group and classify different materials, whether alternative materials are more/less suitable for different situations EG Little Red Riding Hood’s coat, and children will be able to form their own questions and areas of enquiry, provoking independent learning attitudes. All of the project will link closely to these core fairytale stories: The Three Little Pigs, Little Red Riding Hood, The Gingerbread Man and Goldilocks and the Three Bears which will be read together and enjoyed over the two half terms in our guided reading sessions.

This will allow pupils to explore the provocation ‘Fairytale characters have always got it wrong’ and draw their own conclusions based on what they have learned. They will have the opportunity to follow a DT cycle so that products can be designed, made, tested and applied before being evaluated for their purpose.

**Five Fantastic Facts**

At the end of this project, children will have the understanding and confidence to say:

I can name different materials (wood, metal, plastic, glass, brick, rock, paper and cardboard), I can identify different materials, I can group materials based on their properties, I can explain how the shapes of solid objects made from some materials can be changed and how this is done, I can explain which materials are most effective for a given purpose and say why.

**THE ROOTS OF TEACHING FOR LEARNING**

**These are the prerequisites of Teaching for Learning**

*constant feedback from all adults*

*sustained shared thinking between adults and children, between children*

*continuous questioning and hypothesising*

*high expectations for all*

*valuing every person and every contribution*

*learning from mistakes*

*recognising and celebrating achievements*

*willingness to be brave*

Teaching for Learning is rooted in our values. In **WE ARE SCIENTISTS**we are focusing on the following values.

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| **Respect**  Ensuring that children understand how to respect other people’s opinions and viewpoints, with links to PSHE (human characteristics and differences). Focus on respecting one another during experiments. | **Perseverance**  Showing perseverance when working scientifically EG conducting tests and experiments which may not work as you had planned. Keeping on going when building and constructing designs which may not work at first. |

**THE TRUNK OF TEACHING FOR LEARNING**

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| **Teaching for Learning Objectives** | **Activities to Support Teaching for Learning** | |
| **What are the adults doing?** | **What are the children doing?** |
| Materials  LO – To name and label materials.  *Essential Vocabulary: material, metal, rock, glass, plastic, wood*  LO – To distinguish between an object and its material.  *Essential Vocabulary: object, material, common, same*  LO – To describe properties of everyday materials.  *Essential Vocabulary: Describe, properties, hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, not bendy, waterproof, not waterproof, absorbent, not absorbent, opaque, transparent*  LO- To test the properties of materials  *Essential Vocabulary: Behave, test, record*  LO – Can an umbrella be made of just one material?  *Essential Vocabulary: Investigation, prediction, predict, watch, test, record, sensible, results, decision*  LO – To group materials with the same properties  *Essential Vocabulary: Sort, group, compare*  LO – To compare the suitability of different materials  *Essential Vocabulary: Identify, materials, wood, plastic, glass, metal, rock, brick, paper, cardboard, uses, used, properties, hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, not bendy, absorbent, not absorbent, waterproof, not waterproof, transparent, opaque*  LO – Out and About – scavenger hunt!  *Essential Vocabulary: Observations, record, classify, group, similar, safe, unusual*  *LO – To explain how different materials can be used to create the same product*  *Essential Vocabulary: similar, different, effective, suitable, purpose*  LO – To investigate how materials can be changed  *Essential Vocabulary: Change, squashing, bending, twisting, stretching, squash, bend, twist, stretch*  LO – To identify which materials can be recycled  *Essential Vocabulary: Recycle, recycling, reuse, biodegradable, environment, landfill site, recycling depot, shredded, melted, pellets, raw materials, greenhouse gases*  LO – To learn about John McAdam  *Essential Vocabulary: Invent, macadamisation, macadam road, patent, Parliament, compensated, royalties, knighthood, tar, tarmacadam, tarmac*  Fairytale Experiments (learning objectives to cover multiple lessons)  LO – To plan, design and make a strong house to defeat the Big Bad Wolf.  *Essential Vocabulary: Strong, structure, build, test, evaluate*  LO– Which material will give Little Red Riding Hood the most waterproof cloak?  *Essential Vocabulary: waterproof, repel, silky*  LO– To plan, prepare and create a healthy bowl of porridge  *Essential Vocabulary: healthy, nutritious, wholesome, texture, flavour*  LO– Which materials will give Goldilocks the most comfortable mattress?  *Essential Vocabulary: soft, firm, hard, smooth*  LO– To plan, prepare and create the strongest Gingerbread Man  *Essential Vocabulary: strong, thick, malleable*  **National Curriculum Objectives**  **Everyday Materials Year 1:**   * 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   **Use of Everyday Materials Year 2:**   * identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses * compare how things move on different surfaces * find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching   **Working Scientifically Year 1 and Year 2:**  asking simple questions and recognising that they can be answered in different ways  observing closely, using simple equipment  performing simple tests  identifying and classifying  using their observations and ideas to suggest answers to questions  gathering and recording data to help in answering questions.  **DT Cycle Year 1 and Year 2:**  **Design**   * design purposeful, functional, appealing products for themselves and other users based on design criteria * generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology   **Make**   * select from and use a range of tools and equipment to perform practical tasks * select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics   **Evaluate**   * explore and evaluate a range of existing products * evaluate their ideas and products against design criteria   **Technical Knowledge**   * build structures, exploring how they can be made stronger, stiffer and more stable * explore and use mechanisms, in their products.   **Cooking & Nutrition**   * use the basic principles of a healthy and varied diet to prepare dishes * understand where food comes from | * Begin each lesson with a short review of previous learning * Ensuring daily review of new vocabulary including using this on We are Scientists display * Making learning meaningful – having appropriate real-to-life activities including using ‘real’ resources like photographs * Ensuring stations are well set up and support scientific enquiry skills * Providing models to support children * Using small steps to introduce new concepts * Ensuring questioning is tailored to address misconceptions and to move learning on * Revisiting learning | * Following routines * Actively listening * Being prepared and organised * Ready for learning * Engaged in the process * Showing commitment to the learning * Independently applying themselves to the learning * Using prior knowledge * Supporting one another * Asking questions |

**GROWING**

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| The child is beginning to demonstrate understanding and is engaging with the learning. They recall some knowledge and use some vocabulary correctly and in context but maybe not sufficiently confident to do this without prompting. They are carefully led, by the adult, through small steps of guided learning to recognise, practise and repeat key skills. | | |
| **Teaching for Learning Objectives** | **Activities to Support Teaching for Learning** | |
| **What are the adults doing?** | **What are the children doing?** |
| Materials  LO – To name and label materials.  *Essential Skills: Identifying and labelling*  LO – To distinguish between an object and its material.  *Essential Skills: Clarification of understanding of knowledge*  LO – To describe properties of everyday materials.  *Essential Skills: Understanding of key vocabulary*    LO- To test the properties of materials  *Essential Skills: Working scientifically, testing and drawing conclusions*  LO – Can an umbrella be made of just one material?  *Essential Skills: Working scientifically, testing and drawing conclusions*  LO – To group materials with the same properties  *Essential Skills: Identifying, grouping, sorting*  LO – To compare the suitability of different materials  *Essential Skills: Arguing for/against, turn taking, cooperation*  LO – Out and About – scavenger hunt!  *Essential Skills: Recognising, clarifying and reflecting on prior learning*  *LO – To explain how different materials can be used to create the same product*  *Essential Skills: Verbal reasoning, problem solving*  LO – To investigate how materials can be changed  *Essential Skills: Being able to think of ways in which the materials can be changed*  LO – To identify which materials can be recycled  *Essential Skills: Classifying, grouping, explaining choices, seeking for codes/icons which can give us clues*  LO – To learn about John McAdam  *Essential Skills: Research*  Fairytale Experiments (learning objectives to cover multiple lessons)  LO – To plan, design and make a strong house to defeat the Big Bad Wolf.  *Essential Skills: Plan, design, make, review, evaluate*  LO– Which material will give Little Red Riding Hood the most waterproof cloak?  *Essential Skills: Plan, design, make, review, evaluate*  LO– To plan, prepare and create a healthy bowl of porridge  *Essential Skills: Plan, design, make, review, evaluate, cut, mix, test*  LO– Which materials will give Goldilocks the most comfortable mattress?  *Essential Skills: Plan, design, make, review, evaluate*  LO– To plan, prepare and create the strongest Gingerbread Man  *Essential Skills: Plan, design, make, review, evaluate, cut, mix, test* | Modelling, discussing and informing the children about the materials. Which are new? Which are unknown?  Supporting practical learning – matching pictures to words in a model and checking understanding through learning reviews.  Links to real life – how are these materials regularly used? What is their purpose? Can we use vocabulary to describe their properties?  Pre-teaching to ensure pupils understand the terms of each property. Modelling of testing strategies.  Go through initial ideas and questions as a group. Model possible outcomes through discussion. Repeat this again later in lesson for additional clarification.  Allow all children to talk together about key concepts and ideas. Bring children together to share and check initial understanding. Why might these materials have the same properties? How can we tell?  Allow different materials to be on display on different tables. Come up (as a class) with a list of ways we can group and organise these items (refer back to prior learning on properties). Write key q’s on board as investigation prompts. Allow different ways that pupils group effectively to be celebrated.  Giving pupils the chance to question teacher choices and challenge findings.  Give a series of true/false statements to the children EG a coat can be made from both plastic and wool – true/false. Use as initial discussion stimulus.  Revise learning with group – recapping previous vocabulary from other lessons. How can this be applied today?  Pre-teaching of recycling logo. Why do we recycle? Which materials can be recycled and why? Why can’t all materials be recycled?  Support pupils with new language. Address prior knowledge (what do you already know?) Support to understand McAdam’s concept.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations. | With support, using post-it notes to label and identify materials. Complete as a group.  Sorting the pictures into everyday objects and everyday materials and discussing reasoning.  Using a set of materials, children describe the properties to one another.  Children test whether materials are bendy or not. Support children with filling in the grid and to identify the material/s the objects are made from.  Investigation task – allowing pupils to explore key concepts and apply initial ideas. Children complete the investigation with the support of an adult.  Children go on a walk around the classroom or school (if an adult is available). Identify different objects which have different properties e.g. rough and smooth objects, hard and soft object.  Children match the materials to their uses. Mixed ability groups on tables to promote challenge, dialogic talk and investigation. Complete regular recaps with growing pupils to ensure their understanding is secure.  All children to work together in mixed ability groups to make a list of items they spot. On returning to school, pupils to sort into different material groups.  Children match the object with the most suitable material it could be made from. Encourage children to verbally explain their choices. (Some objects might be connected to more than one material and some materials might have more than one object connected to them. Encourage this discussion.)  Children explore the objects and record which can be bent, squashed, twisted and stretched.  Children sequence 6 pictures and with support, label them correctly.  Children complete their fact file with adult support. Use the word bank to help them.  Children are to work in mixed ability pairs on creating an effective structure. Which materials would be strongest? Assessment opportunity based on prior learning.  Children are to work in mixed ability pairs on creating an effective structure. Which materials would be strongest? Assessment opportunity based on prior learning.  Children are to work independently on planning their perfect bowl of porridge. Which ingredients are healthiest? Which would add flavour? Taste test with the rest of the class.  Supported work to select most effective mattress. Links to maths to create a score of comfort (add to a table – statistics).  Table group task. Children to work together on the key skills and the planning stage. Once cooked and cooled, Gingerbread Men will be tested on their strength and evaluated as a group. |

**BLOSSOMING**

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| The child is engaged and enjoying the learning and able to apply the necessary skills and knowledge in order to demonstrate their understanding of the learning. They confidently meet the objectives and demonstrate a full ability to use the vocabulary correctly and in context. They are confident when making links and explaining their method to others. They are encouraged to explore and experiment whilst the adult sets challenges, hypothesises and explores misconceptions with them. | | |
| **Teaching for Learning Objectives** | **Activities to Support Teaching for Learning** | |
| **What are the adults doing?** | **What are the children doing?** |
| Materials  LO – To name and label materials.  *Essential Skills: Identifying and labelling*  *Essential Knowledge: To know the names of materials*  LO – To distinguish between an object and its material.  *Essential Skills: Clarification of understanding of knowledge*  *Essential Knowledge: Knowing the difference between an item and the material it is made from*  LO – To describe properties of everyday materials.  *Essential Skills: Understanding of key vocabulary*  *Essential Knowledge: To know the properties of each material*    LO- To test the properties of materials  *Essential Skills: Working scientifically, testing and drawing conclusions*  *Essential Knowledge: To know how to test properties fairly*  LO – Can an umbrella be made of just one material?  *Essential Skills: Working scientifically, testing and drawing conclusions*  *Essential Knowledge: Materials have many different purposes*  LO – To group materials with the same properties  *Essential Skills: Identifying, grouping, sorting*  *Essential Knowledge: To know why certain materials can be grouped together based on their features/properties*  LO – To compare the suitability of different materials  *Essential Skills: Arguing for/against, turn taking, cooperation*  *Essential Knowledge: To know why some materials are more suitable than others*  LO – Out and About – scavenger hunt!  *Essential Skills: Recognising, clarifying and reflecting on prior learning*  *Essential Knowledge: Independently identifying materials*  *LO – To explain how different materials can be used to create the same product*  *Essential Skills: Verbal reasoning, problem solving*  *Essential Knowledge: Knowing that materials can have different purposes*  LO – To investigate how materials can be changed  *Essential Skills: Being able to think of ways in which the materials can be changed*  *Essential Knowledge: To understand how materials can change and whether this can be a reversible change*  LO – To identify which materials can be recycled  *Essential Skills: Classifying, grouping, explaining choices, seeking for codes/icons which can give us clues Essential Knowledge: To know why some materials are/aren’t recyclable*  LO – To learn about John McAdam  *Essential Skills: Research*  *Essential Knowledge: Why John McAdam is an important person*  Fairytale Experiments (learning objectives to cover multiple lessons)  LO – To plan, design and make a strong house to defeat the Big Bad Wolf.  *Essential Skills: Plan, design, make, review, evaluate*  *Essential Knowledge: To know which materials are strongest for the purpose*  LO– Which material will give Little Red Riding Hood the most waterproof cloak?  *Essential Skills: Plan, design, make, review, evaluate*  *Essential Knowledge: To select the most appropriate waterproofing material*  LO– To plan, prepare and create a healthy bowl of porridge  *Essential Skills: Plan, design, make, review, evaluate, cut, mix, test*  *Essential Knowledge: To know which items are healthiest*  LO– Which materials will give Goldilocks the most comfortable mattress?  *Essential Skills: Plan, design, make, review, evaluate*  *Essential Knowledge: To be able to collect findings and evaluate*  LO– To plan, prepare and create the strongest Gingerbread Man  *Essential Skills: Plan, design, make, review, evaluate, cut, mix, test*  *Essential Knowledge: To understand which ingredients can give strength to the mixture* | Modelling, discussing and informing the children about the materials. Which are new? Which are unknown? What is your prior knowledge?  Questioning initial concepts/thoughts and allowing children to explain reasoning.  Links to real life – how are these materials regularly used? What is their purpose? Can we use vocabulary to describe their properties? Give children false answers to see if they have the confidence to correct.  Pre-teaching to ensure pupils understand the terms of each property. Modelling of testing strategies and how to ensure that this is fair and accurate.  Go through initial ideas and questions as a group. Model possible outcomes through discussion. Repeat this again later in lesson for additional clarification and ask blossoming children to explain to growing pupils.  Allow all children to talk together about key concepts and ideas. Bring children together to share and check initial understanding. Why might these materials have the same properties? How can we tell?  Allow different materials to be on display on different tables. Come up (as a class) with a list of ways we can group and organise these items (refer back to prior learning on properties). Write key q’s on board as investigation prompts. Allow different ways that pupils group effectively to be celebrated.  Giving pupils the chance to question teacher choices and challenge findings. Is Mrs G right about this object and it’s material? Why?  Give a series of true/false statements to the children EG a coat can be made from both plastic and wool – true/false. Use as initial discussion stimulus and allow children to come up with their own ways of proving/disproving.  Revise learning with group – recapping previous vocabulary from other lessons. How can this be applied today? Can you feedback to the rest of your table?  Pre-teaching of recycling logo. Why do we recycle? Which materials can be recycled and why? Why can’t all materials be recycled? What can we do to promote recycling in our school?  Support pupils with new language. Address prior knowledge (what do you already know?) Support to understand McAdam’s concept.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations. | Match the labels to the correct photos of the materials (wood, plastic, glass, metal, water and rock) by drawing connecting lines. Verbal discussion to explain how they know this is correct.  Fill in the missing words to show which material(s) each object is made from. Use the word bank.  Children match the properties to the correct picture and explain to the rest of their table how they know they are correct. Self-assessment opportunity.  Children test whether materials are waterproof and transparent or opaque. Support the children to identify the material/s the objects are made from.  Investigation task – allowing pupils to explore key concepts and apply initial ideas. Children complete their investigation in small groups.    Give children 4 sorting hoops and ask them to label them rough and smooth and dull and shiny. Children find objects from around the classroom to put into each hoop.  Children look at the Uses of Everyday Materials Photo Cards to help identify uses of everyday materials.  All children to work together in mixed ability groups to make a list of items they spot. On returning to school, pupils to sort into different material groups.  Children to read the minibrief for an object, suggest which material would be suitable for the job and explain why. Encourage children to eliminate materials which wouldn’t be suitable to help them reach their decision.  Children explore the objects and record which can be bent, squashed, twisted and stretched. Then they find 3 objects which cannot be changed in this way.  Children sequence 8 pictures and write sentences explaining what is happening in each picture, using the word bank to help them.  Children use the John McAdam Word Mat to help them complete their fact file.  Children are to work in mixed ability pairs on creating an effective structure. Which materials would be strongest? Assessment opportunity based on prior learning.  Children are to work in mixed ability pairs on creating an effective structure. Which materials would be strongest? Assessment opportunity based on prior learning.  Children are to work independently on planning their perfect bowl of porridge. Which ingredients are healthiest? Which would add flavour? Taste test with the rest of the class.  Supported work to select most effective mattress. Links to maths to create a score of comfort (add to a table – statistics).  Table group task. Children to work together on the key skills and the planning stage. Once cooked and cooled, Gingerbread Men will be tested on their strength and evaluated as a group. |

**FLOURISHING**

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| The child is exhibiting a depth of learning and enthusiasm relating to the objectives. They can select knowledge and understanding for different contexts and justify their choice when using their repertoire of skills. They are able to revise, review and reflect on what they know and create their own solutions to situations, justifying the rationale for what they are demonstrating. They are able to, and indeed want to, ‘show off’ with what they know and what they can do; they want to share that they are flourishing and how they know they are flourishing. Adults are present for affirmation and organisation. | | |
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Which are new? Which are unknown? What is your prior knowledge? How can you explain this to a partner?  Questioning initial concepts/thoughts and allowing children to explain reasoning.  Links to real life – how are these materials regularly used? What is their purpose? Can we use vocabulary to describe their properties? Give children false answers to see if they have the confidence to correct.  Pre-teaching to ensure pupils understand the terms of each property. Modelling of testing strategies and how to ensure that this is fair and accurate.  Go through initial ideas and questions as a group. Model possible outcomes through discussion. Repeat this again later in lesson for additional clarification and ask blossoming children to explain to growing pupils.  Allow all children to talk together about key concepts and ideas. Bring children together to share and check initial understanding. Why might these materials have the same properties? How can we tell?  Allow different materials to be on display on different tables. Come up (as a class) with a list of ways we can group and organise these items (refer back to prior learning on properties). Write key q’s on board as investigation prompts. Allow different ways that pupils group effectively to be celebrated.  Giving pupils the chance to question teacher choices and challenge findings. Is Mrs G right about this object and its material? Why?  Give a series of true/false statements to the children EG a coat can be made from both plastic and wool – true/false. Use as initial discussion stimulus and allow children to come up with their own ways of proving/disproving.  Revise learning with group – recapping previous vocabulary from other lessons. How can this be applied today? Can you feedback to the rest of your table?  Pre-teaching of recycling logo. Why do we recycle? Which materials can be recycled and why? Why can’t all materials be recycled? What can we do to promote recycling in our school?  Support pupils with new language. Address prior knowledge (what do you already know?) Support to understand McAdam’s concept.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations.  Check prior knowledge and recap. Make links to provocation. Pre-teach idea of plan, design, make, review. Discussion pointers throughout to question and ignite imaginations. | Label the picture with the correct material (wood, plastic, glass, metal, water and rock). Verbal discussion to explain how they know this is correct.  Choose three objects to draw and label. Then write a sentence explaining which material(s) each object is made from.  Children create a poster describing a chosen material. Describe the properties of the material and objects which can be made from it.  Children test whether materials are waterproof and absorbent. Support the children to identify the material/s the objects are made from.  Investigation task – allowing pupils to explore key concepts and apply initial ideas. Children complete their investigation in small groups.  Give children 4 sorting hoops and ask them to label them opaque/transparent/ waterproof/not waterproof. Children sort the Waterproof Sorting Cards and Transparent or Opaque Sorting Cards into the hoops.  Children list and consider which everyday materials have the most and least uses. Extend children by asking to explain which properties materials have that make them suitable for that use. Use the Property Vocabulary Cards to support.  All children to work together in mixed ability groups to make a list of items they spot. On returning to school, pupils to sort into different material groups.  Children draw their own everyday object and explain why they think different materials have been used to make certain parts. Encourage children to choose an object which is made of more than one material.  Children explore the objects and record which can be bent, squashed, twisted and stretched. Then go on to explain why they think some materials can be changed in this way and others cannot.  Children write their own sentences explaining how a plastic bottle gets recycled.  Children choose their own subheadings and complete their fact file independently.  Children are to work in mixed ability pairs on creating an effective structure. Which materials would be strongest? Assessment opportunity based on prior learning.  Children are to work in mixed ability pairs on creating an effective structure. Which materials would be strongest? Assessment opportunity based on prior learning.  Children are to work independently on planning their perfect bowl of porridge. Which ingredients are healthiest? Which would add flavour? Taste test with the rest of the class.  Supported work to select most effective mattress. Links to maths to create a score of comfort (add to a table – statistics).  Table group task. Children to work together on the key skills and the planning stage. Once cooked and cooled, Gingerbread Men will be tested on their strength and evaluated as a group. |

** WE ARE SCIENTISTS **

**Class:** Pears (Y1/2) **Teacher**: Mrs Gardiner **Term and Year:** Year B – Autumn Term

**FINAL FLOURISH**

*Enabling children to reflect on and celebrate their learning, whilst connecting their knowledge over space and time.*

As a Final Flourish, pupils will have the opportunity to hold a Science Testing Afternoon with Y5/6. Here they will work in mixed ‘investigation teams’ to test a range of materials and their suitability for different purposes – all relating to different fairytales which all children will be familiar with (a page from each of the stories where the ‘problem’ occurs will be out on each station to be read together before the investigation starts. This will ignite imagination and give the challenges a purpose which closely link to our initial provocation). This will be introduced as a circuit of different stations with an iPad on each one so the children can photograph their learning journeys throughout the afternoon. Y5/6 children will also have the opportunity to work with me beforehand to come up with some of the experiment ideas for each station.

All teams will be a mixture of Y1/2 and Y5/6 children and will include the following roles: Revolutionary Researcher, Cool Comparer, Terrific Time-Keeper, Fabulous Fair Tester, Evaluation Guru.

The photographs which will be taken will be compiled to create a Final Flourish Pack which will be shared on the classroom display board.