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| **Year****Group** |  | **Autumn** |  | **Spring** |  | **Summer** |
| **EYFS** |  | Expressive Arts and Design ELG: Creating with Materials Children at the expected level of development will: -Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; - Share their creations, explaining the process they have used; - Make use of props and materials when role playing characters in narratives and stories. |
| **1** | **Knowledge** | **Construction**Christmas musical shakers Children will construct musical shakers from recycled tubes/yoghurt pots by using fastenings to attach two objects together. They will create a musical instrument.  | **Knowledge** | **Food****(Fruit and veg)**Children will explore and try different fruit and veg. They will learn how to wash, cut and prepare the fruit and veg.  | **Knowledge** | **Mechanisms****Moving puppets -(linked to English ‘The Flying Bath’)**Children will create puppets using simple sliders that move from side to side or up and down. The will also use doweling to attach to moving parts (legs, arms & head). They will draw their designs. The children will then attach the sliders and doweling using split pins.  |
| **Skills** | * To know about simple fastenings.
* To explain what is being made and why
* To plan a product using pictures and words
 | **Skills** | * To explain what is being made and why.
* To know basic food hygiene.

\*To know how to peel, cut, grate and mix foods. |  | * To explain what is being made and why.
* To plan a product using pictures and words.
* To know about movement of simple mechanisms.
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| **Year****Group** |  | **Autumn** |  | **Spring** |  | **Summer** |
| **2** | **Knowledge** | **Mechanisms****(Creating a moving train)** Children will design a rocket that uses cam mechanisms – making moving parts on the rocket. They will design their train in style of Stephens Rocket. | **Knowledge** | **Food****(African Food)**Children will design and create their own couscous salad. Children will explore different African foods and salads on the market, considering tastes, texture, smell and appearance of dishes and design their own African couscous salad.* To know how to peel, cut, grate, mix and mould foods.
 | **Knowledge** | **Textiles**Children will create a blanket by exploring gluing and sewing joining techniques. The children will design their blanket by attaching other material and decorative objects, such as, buttons, sequins and ribbons. |
| **Skills** | * To think of their own ideas and plan what to do next.
* Describe designs using pictures, diagrams and words.
* To be able to explain what is being made and why.
* To be able to choose appropriate tools and equipment.
* To understand and use cam mechanisms – using a cam, slider and follower.
 | **Skills** | * To think of their own ideas and plan what to do next.
* To be able to explain what is being made and why.
* Describe designs using pictures, diagrams and words.
* To be able to choose and safely use appropriate tools and equipment.
* Understand basic food hygiene.
* Follow instructions in a recipe.
 | **Skills** | * To think of their own ideas and plan what to do next.
* Describe designs using pictures, diagrams and words.
* To be able to explain what is being made and why.
* Describe designs using pictures, diagrams and words.
* To be able to choose appropriate tools and equipment.
* To cut and join textiles using a running stitch. Decorate using a range of items (buttons, sequins, beads, ribbons)
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| **3** | **Knowledge** | **Construction****(Creating Christmas boxes)**Children will be creating Christmas boxes. They will design and make their shell structure using a variety of sheet materials and wood.  | **Knowledge** | **Food****(Creating Bread)**Children will be baking. The children will research, design and make their bread and be able to cutting equipment safely and accurately | **Knowledge** | **Textiles****(Making 2D shape to 3D product)****Hindu Textiles**Children will be learning a number of stiches and joining techniques, such as, back stich, running stitch and blanket stitch. They will be able to take a 2D shapes and attach them together to create a 3D product.  |
| **Skills** | To research their own designs.Follow design criteria to create modelUse tools and equipment appropriately* To think of their own ideas and plan what to do next.
* Describe designs using an accurately labelled diagram and in words.
* To be able to explain what is being made and why.
* To be able to choose appropriate tools and equipment.
* assemble and join materials.
 | **Skills** | * To know how to peel, cut, grate and mix. Begin to cook foods
* To think of their own ideas and plan what to do next.
* Describe designs using an accurately labelled diagram and in words.
* To be able to explain what is being made and why.
* To be able to choose appropriate tools and equipment.
* To know basic food hygiene.
* To understand the nutritional aspects of healthy foods.
 | **Skills** | * To cut and join textiles using a running stitch. Decorate using a range of items (buttons, sequins, beads, ribbons)
* Use a range of tools and equipment accurately. Measure, mark out assemble and join materials.
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| **4** | **Knowledge** | **Electrical systems** **(Diwali Lamp)**Children will design and create a colourful Diwali Lantern. Children will use simple electrical circuits that will include wires, bulbs, batteries and switches . They will then design and create a casing for their Diwali lantern. | **Knowledge** | **Mechanisms****(Hydraulic Heads)**Children will create their own hydraulic heads using the mechanics of hydraulics. Explore different designs and make their own head from the research that has been carried out. To know about movement and simple mechanisms using hydraulics pressure and force | **Knowledge** | **Food****(Creating food for an Eid Feast)** Children will explore a variety of Islamic foods eaten at the Festival of Eid. They will then use their experiences to create their own Eid Feast looking at presentation and evaluating and comparing a range of products.* Knowledge of food hygiene.
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| **Skills** | * Have knowledge of electrical circuits and how they work.
* To think of their own ideas and plan what to do next.
* Describe designs using an accurately labelled diagram and a written explanation.
* Suggest improvements to develop and refine a planned idea.
* To be able to use a range of tool and equipment with accuracy.
* To be able to measure and cut wood accurately.
 | **Skills** | * To be able to generate more than one idea for how to create a product.
* Gather information to help to design a successful product.
* Describe designs using an accurately labelled diagram and a written explanation.
* Suggest improvements to develop and refine a planned idea.
* To be able to use a range of tool and equipment with accuracy.
 | **Skills** | * To be able to generate more than one idea for how to create a product.
* Gather information to help to design a successful product.
* Describe designs using an accurately labelled diagram and a written explanation.
* Follow a recipe.
* Evaluate a recipe, considering: taste, smell, texture and appearance.
* Evaluate and compare a range of products.
* To be able to use a range of tool and equipment with accuracy.
* Be able to cut, grate, peel and mix.
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| **5** | **Knowledge** | **Moving Structure****(Design and create a rocket capable of taking passengers to space)**Children will research and design their own rocket, considering space and practicability for carrying passengers. They will make a stable launch pad for their rocket/compartments for passengers/the rocket will move with a pulley system. | **Knowledge** | **Food****(Spanish Food Tasting and preparing Spanish Food)**Children will research Spanish foods and taste a variety of them. They will then design and prepare their own Spanish Dish.* To understand where food comes from
* To know basic food hygiene.
* To know and understand the nutritional value of foods.
 | **Knowledge** | **Textiles****(Design and create a costume/waist coat)**Children will create a piece of costume for Peter Pan. Using a range of stiches and fastenings, and measuring skills. The children will design and create using a variety of fabrics and tools.  |
| **Skills** | * To be able to generate a range of ideas.
* To be able to create a detailed plan with step-by-step instructions an diagrams.
* To be able to produce an exploded diagram of their design.
* To be able to use a range of tools and equipment precisely and safely.
* To be able to measure and saw wood accurately.
* To be able to construct a pulley system.
* To be able to evaluate the appearance and function of their model and suggest improvements.
 | **Skills** | * To be able to create a detailed recipe with step-by-step instructions an diagrams.
* To be able to use a range of tools and equipment precisely and safely.
* To be able to cut/peel/grate and mix foods.
* Making improvements to a recipe to make it healthy.
 | **Skills** | * To be able to generate a range of ideas.
* To be able to create a detailed plan with step-by-step instructions an diagrams.
* To be able to take specific measurements.
* To be able to pin and tack fabrics.
* To be able to use a range of stiches.
* To be able to join fabrics accurately.
* To be able to attached fastenings.
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| **Year****Group** |  | **Autumn** |  | **Spring** |  | **Summer** |
| **6** | **Knowledge** | **Electrical Systems** **(Designing and making an electronic game)**Children will work in groups to create an electronic game using their knowledge of circuits. They will design their game and create a working circuit to make their game light up or make a sound. | **Knowledge** | **Food****(Creating a healthy packed lunch for a school trip).**Children will create and design a healthy packed lunch. They will research healthy foods. Undertake market research of favourite packed lunch foods with an appropriate audience. To be able to understand the foods that complement each other. | **Knowledge** | **Structures****(Building a bird house/feeder for the woodland area)** Children will work in groups to design and construct a wooden bird house suitable for the school woodland area. They will use research and build on prior knowledge of structures. |
| **Skills** | * To be able to use sheet and construction materials appropriately.
* To be able to generate a range of ideas.
* To be able to create a detailed plan with step-by-step instructions and diagrams and an exploded diagram.
* To use a range of tools and equipment precisely.
* To be able to discuss the aesthetic qualities and functionality of products.
* To be able to evaluate the appearance and function of the product.
* To be able to identify and suggest what improvements could be made considering material, sustainability and how much the product would cost to make.
* To be able to create a complete simple circuit.

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 | **Skills** | * To be able to generate a range of ideas.
* To be able to create a detailed plan with step-by-step instructions an diagrams.
* To use a range of tools and equipment precisely.
* To be able to follow a recipe including using the correct quantities of each ingredient.
* Adapt a recipe based on research.
* Work safely and hygienically and with independence.
* To be able to cut/chop/grate/slice/mix a range of fillings.
* To be able to evaluate the appearance and function of the product.
* To be able to identify and suggest what improvements could be made considering material, sustainability and how much the product would cost to make.
 | **Skills** | * To be able to generate a range of ideas.
* To be able to create a detailed plan with step-by-step instructions and exploded diagrams.
* To be able to measure, mark and cut wood accurately.
* To use a range of tools and equipment precisely.
* To be able to discuss the aesthetic qualities and functionality of products.
* To be able to evaluate the appearance and function of the product and adapt their design as it is developed.
* To be able to identify and suggest what improvements could be made considering material, sustainability and how much the product would cost to make.
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