

**Year Group 4**  
Summer

**Knowledge Organiser:** Design & Technology

**Theme:** Extreme Earth



**Strands:**  
Cooking & Nutrition

**What have I learnt already:**

In KS1, you learnt to group foods into the five groups on the Eatwell Plate

That hygiene is important when preparing food

In Year 3, you learnt to cut, grate & peel ingredients accurately & safely

To follow a recipe

To measure & weigh ingredients appropriately

About what it means to eat a healthy diet

**Key knowledge that will be learnt:**

That a healthy diet is made up from a variety of different food & drink



Carbohydrates



Fruit & Vegetables



Proteins



Dairy



Sugars & Fats



To know how to use equipment safely

To prepare ingredients hygienically using the appropriate utensils

To use scales to measure weight in grams & kilograms



To give an opinion on different foods & meals after tasting



**Key Vocabulary:**

Hygienic

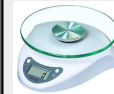


Good food hygiene is about handling, preparing & storing food & drink correctly to prevent the spread of germs that can make us feel unwell

Grams & kilograms

Units of measurement  
Grams can measure smaller amounts. There are 1000 grams in a kilogram

scales



Equipment used to accurately measure out the correct weight of ingredients needed for a recipe

Healthy diet

Eating the right amounts of a variety of foods to get the nutrients we need to stay healthy and grow our bodies well

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**Strands:**

Textiles:  
Lavender bags

**What have I learnt already:**

In Y2, you learnt that templates are useful to create the same shape over and over again

That pinning and stitching (using running stitch) can join fabric pieces together temporarily or permanently and securely

To evaluate your own product against set design criteria

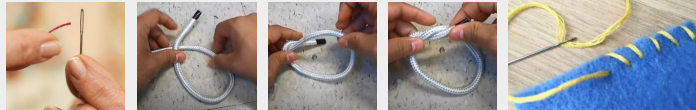
**Key knowledge that will be learnt:**

The ways in which Lavender has been used for centuries: from the ancient Egyptians, Romans, the Tudors, to the present day

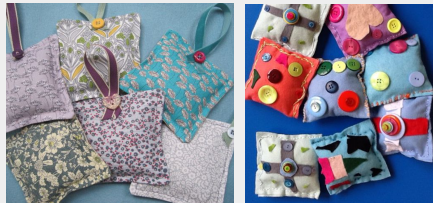


That fabric pieces can be joined using different stitches

To prepare a needle & thread and sew on a button & ribbon loop



To design and make a product for a user and evaluate your work against design criteria



**Key Vocabulary:**

|              |   |
|--------------|---|
| overstitch   | A stitch made over the edge of a piece of fabric                                    |
| Lavender bag | A small bag filled with fragrant herbs, traditionally used to scent clothes & linen |
| button       | Used to fasten fabric pieces together, or for decoration                            |
| thread       | A length of twisted fibres made from cotton or silk & used in sewing                |
| knot         | Used in hand sewing to secure thread to fabric                                      |

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**Strands:**

Electrical Systems -  
monitoring & control

**What have I learnt already:**

In EYFS & KS1, you  
programmed Beebots to  
move in different ways

You have learnt to select,  
assemble & connect Lego  
components to create a  
range of products

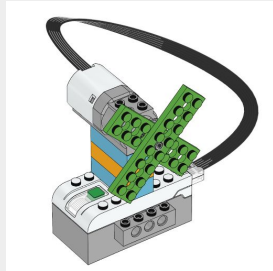
That testing, evaluating &  
adapting a product is an  
important part of the  
design process

**Key knowledge that will be learnt:**

To select, assemble & connect  
components to create a  
battery-powered, functional,  
electrical product using Lego  
WeDo



You will apply your understanding of computing to  
program, monitor & control a **light** & a **motor** in your  
electrical product.



You will find out Bill Gates, an  
important pioneer in the  
development of modern  
computers



**Key Vocabulary:**

|                  |   |
|------------------|---|
| Program          | A sequence of instructions that can be used to control electrical components  |
| System           | A set of related parts/components that together achieve an outcome            |
| process          | How a computer program controls one or more output devices                    |
| Micro controller | A device that can be programmed to control how an electrical product operates |
| Motor            | A device that creates movement  |
| Input device     | Components used to control an electrical circuit eg. switches, keyboard       |
| Output device    | Components that produce an outcome eg. lights, motors, buzzers                |