Big Questions:

What local ingredients make the best savoury dish? How can we transport food effectively?

Key Vocabulary:

Characteristic: A quality or appearance that makes an individual or group different from others.

Communicate: Giving, receiving or sharing information.

Compare: Seeing what is the same and different about things.

Design: A plan for how something will look or be made.

Evaluate: To assess the strengths and weaknesses of an object.

Improve: Make better

Material: The substance used to make something.

Product: A service or item

Recipe: provides instructions about how to create a type of food

Structure: Something of many parts that is put together.

Knowledge from Y1 that will help me answer the big question:

- Design criteria are the explicit goals that a project must achieve.
- Different materials can be used for different purposes, depending on their properties. For example, cardboard is a stronger building material than paper.

Knowledge from Y2 that will help me answer the big question:

- Structures can be made stronger, stiffer and more stable by using cardboard rather than paper and triangular shapes rather than squares.
- A broader base will also make a structure more stable.

New knowledge that will help me answer the big question:

Shell structures are hollow, 3-D structures with a thin covering like a box. Frame structures are made from thin, rigid components like a tent frame.

New knowledge that will help me answer the big question:

Design: • Create a cool box designed to transport food effectively.

Make: • Use a wide range of tools and materials to create my own product.

Evaluate: • Consider strengths of my product and how it could be improved. • Use design criteria to assess the product

New knowledge that will help me answer the big question:

Some foods are healthy and • some are unhealthy.

A healthy diet includes a balance or proteins, carbohydrates, fruit and vegetables.

Our food comes from different sources: • some foods are caught e.g. fish, crab.

• some foods are reared e.g. lambs, cows. These give us products such as meat and milk which can be used to produce cheese and yoghurt.

• some foods are grown e.g. fruits and vegetables such as strawberries potatoes or grains such as rice or wheat.

New knowledge that will help me answer the big question:

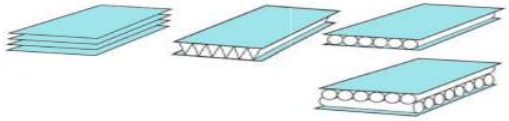
Technical Knowledge

Packaging is a shell structure that is used to contain, protect and present a product.

Designs can be adapted to meet the needs of the design brief.

Different techniques can affect the strength of the packaging. E.g. **folding and shaping, corrugating, ribbing, laminating**.

Laminating Ribbing Corrugating.



Market research can be conducted to identify the needs of the consumer.

As an artist, the essential knowledge I need to answer the big question is:	Date
Identify the main food groups (carbohydrates, protein, dairy, fruits and vegetables, fats and sugars).	
Identify and name foods that are produced in different places.	
Develop design criteria to inform a design.	
Plan which materials will be needed for a task and explain why	
Prepare and cook a simple savoury dish.	
Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account	
Explain how an existing product benefits the user.	
Describe how key inventions in design and technology have shaped the world	
Explain the similarities and difference between the work of two designers.	
Compare artists, architects and designers and identify significant characteristics of the same style of artwork, structures and products through time.	
Create shell or frame structures using diagonal struts to strengthen them.	
Use tools safely for cutting and joining materials and components	
Create a 3-D form using malleable or rigid materials, or a combination of materials.	
Incorporate a simple series circuit into a model	
Use appliances safely with adult supervision.	
Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products.	