ADVENT TERM  DESIGN AND TECHNOLOGY – YEAR 4 - Medium Term Planning – Food and Nutrition  Healthy Ready-to-Go Snacks			
LESSON 1	LESSON 2	LESSON 3	
Cooking and Nutrition	Cooking and Nutrition	Make	
understanding and skills in order to design	<ul> <li>Think about presenting product in interesting/ attractive ways.</li> <li>Aim:</li> </ul>	LEARNING INTENTION:  To know that most cardboard packaging is produced from a net.  Disciplinary Knowledge:  Apply a range of finishing techniques with some accuracy.  Assemble, join and combine materials and components with some accuracy.  Aim:  Develop the creative, technical, and practical expertise to perform everyday tasks confidently and to participate successfully in an increasingly technological world.	
Key Vocabulary:	Key Vocabulary:	Key Vocabulary:	
decay, deteriorates, pasteurisation, micro- organisms	ļ -	annotated sketches, exploded diagrams, nets, shell frame	
Recap & retrieval  Recap Year 3: Key inventions in design and technology have changed the way people live.	Decay can be prevented or delayed by preservation methods, such as drying, salting, pickling, canning, pasteurising, refrigerating or freezing the food.	Pecall & retrieval     Decay can be prevented or delayed by preservation methods, such as drying, salting, pickling, canning, pasteurising, refrigerating or freezing the food.	

# **Key Knowledge:**

## Child:

- Food deteriorates due to the growth of microorganisms.
- Decay can be prevented or delayed by preservation methods, such as drying, salting, pickling, canning, pasteurising, refrigerating or freezing the food.
- Food packaging plays an important role in **Teacher:** keeping foods fresh.
- The 'use by' date shows when the food is no longer safe to eat.
- The 'best before' date shows the date after which the food will lose some flavour or texture.

# Teacher:

- By the 1990s, consumers did not understand how long their products would actually last.
- As a result, sell by dates were creating heaps of food waste.
- Use by and best before dates are the outcome of work by campaigners who asked for something more accurate than a sell by dates
- In 1864, French scientist Louis Pasteur invented the pasteurization process after experimenting with heated wine.

# **Key Knowledge:**

## Child:

- Food packaging is important for several reasons.
- Plastic is a harmful and wasteful material because it takes thousands of years to break down.

- Food packaging protects food, makes food last longer, makes it easier to transport, makes food encourages people to buy it and provides information about the product.
- 36% of plastics are used in packaging of which 85% of single use plastics ends up in landfills.
- Significant designers and inventors can shape the world.
- Design features are the aspects of a product's design that the designer would like to emphasise, such as the use of a particular material or feature that makes the product easier to use or more durable.

# **Key Knowledge:**

## Child:

 Food packaging is produced using a net, which is a 2-D piece of material that is folded and secured to make a 3-D shape.

Plastic is a harmful and wasteful material because it takes

thousands of years to break down.

• Annotated sketches and exploded diagrams show specific parts of a design, highlight sections or show functions.

# Teacher:

- They communicate ideas in a visual, detailed way.
- Shell and frame structures can be strengthened by gluing several layers of card together, using triangular shapes rather than squares, adding diagonal support struts and using 'Jinks' corners (small, thin pieces of card cut into a right-angled triangle and glued over each joint to straighten and strengthen them).

ADVENT TERM			
DESIGN AND TECHNOLOGY – YEAR 4 - Medium Term Planning – Food and Nutrition			
LESSON 4	Healthy Ready-to-Go Snacks LESSON 5	LESSON 6	
Design	Cooking and Nutrition	Evaluate	
Cooking and Nutrition		Cooking and Nutrition	
	LEARNING INTENTION:		
LEARNING INTENTION:	To know that you can modify a design after	LEARNING INTENTION:	
To know that a product must be fit for	discussing with others.	To know that testing a product can help	
purpose.		evaluate the successes and identify the	
	Disciplinary Knowledge:	improvements	
Disciplinary Knowledge:	<ul> <li>Use some of the following techniques:</li> </ul>	· ·	
<ul> <li>Use research for design ideas.</li> </ul>	peeling, chopping, slicing, grating,	Disciplinary Knowledge:	
<ul> <li>Show design meets a range of</li> </ul>	mixing, spreading, kneading and	<ul> <li>Use criteria to evaluate product.</li> </ul>	
requirements and is fit for purpose.	baking.	Describe 'Eat Well' plate and how a	
requirements and its market par peace.		healthy diet / variety / balance of food	
Aim:	Aim:	and drinks.	
Build and apply a repertoire of knowledge	Develop the creative, technical, and		
understanding and skills in order to design	practical expertise to perform everyday	Aim:	
and make high quality products for a wide	tasks confidently and to participate	Critique, evaluate and test their ideas and	
range of users.	successfully in an increasingly technological	products and the work of others.	
	world.		
Key Vocabulary:	Key Vocabulary:	Key Vocabulary:	
healthy, taste, practicality	materials, components, fresh, damage, best	evaluation, design criteria, evidence,	
	before, use by, healthy, packaging	supervision	
Recall & retrieval	Recall & retrieval	Recall & retrieval	
Decay can be prevented or delayed by preservation		Decay can be prevented or delayed by preservation	
methods, such as drying, salting, pickling, canning, pasteurising, refrigerating or freezing the food.	methods, such as drying, salting, pickling, canning, pasteurising, refrigerating or freezing the food.	methods, such as drying, salting, pickling, canning, pasteurising, refrigerating or freezing the food.	
Plastic is a harmful and wasteful material because i	Plastic is a harmful and wasteful material because it	Plastic is a harmful and wasteful material because it takes	
takes thousands of years to break down.	takes thousands of years to break down.	thousands of years to break down.	

- Food packaging is produced using a net, which is a 2-D piece of material that is folded and secured to make a 3-D shape.
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- Healthy snacks include fresh or dried fruit and vegetables, nuts and seeds, rice cakes with low-fat cream cheese, homemade popcorn or chopped vegetables with hummus.
- Food packaging is produced using a net, which is a 2-D piece of material that is folded and secured to make a 3-D shape.
- Healthy snacks include fresh or dried fruit and vegetables, nuts and seeds, rice cakes with low-fat cream cheese, homemade popcorn or chopped vegetables with hummus.
- Recipe ingredients have different tastes and appearances.

# **Key Knowledge:**

#### Child:

 Healthy snacks include fresh or dried fruit and vegetables, nuts and seeds, rice cakes with low-fat cream cheese, homemade popcorn or chopped vegetables with hummus.

# Teacher:

- Cooking techniques include baking, boiling, frying, grilling and roasting.
- A healthy packed lunch might include a brown or wholemeal bread sandwich containing eggs, meat, fish or cheese, a piece of fresh fruit, a low-sugar yoghurt, rice cake or popcorn and a drink, such as water or semi-skimmed milk.

# **Key Knowledge:**

## Child:

- Recipe ingredients have different tastes and appearances.
- They look and taste better and are cheaper when in season.

## Teacher:

- It is important to select the correct material or component for the specific purpose, depending on the design criteria.
- Foods need packaging to keep them fresh, safe to eat and free from damage.
- Food packaging also provides nutritional information, 'use by' and 'best before' dates, and the materials and recyclability of the packaging.
- Different materials and components have a range of properties, making them suitable for different tasks.

# **Key Knowledge:**

# Child:

 Evaluation also includes suggesting improvements and explaining why they should be made.

# Teacher:

 Evaluation can be done by considering whether the product does what it was designed to do, whether it has an attractive appearance, what changes were made during the making process and why the changes were made.

### Assessment

Cumulative Quiz. Retrieval Practice.