

Autumn Term: 2<sup>nd</sup> Half  
Design and Technology



Stick in your  
new title page.

**Programme of study:**

- **Design:** Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
- **Design:** Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.
- **Make:** Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.
- **Evaluate:** Investigate and analyse a range of existing products.
- **Evaluate:** Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- **Food:** Understand and apply the principles of a healthy and varied diet.
- **Food:** Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- **Food:** Understand seasonality, and know where and how a variety of ingredients are grown, reared, sought and processed.
- **Aims Breadth:** Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.



### Design and Technology Knowledge Organiser - Year 3



#### Key Concepts / Knowledge

Biscuits are baked flour-based snacks, often sweet in flavour. They often contain special ingredients for added flavour.



Gingerbread



Sugar biscuit



Oat cookie

#### Key skills for making biscuits:

- measuring - using scales or measuring jugs to ensure you have the correct amount of each ingredient
- mixing - using a spoon to combine ingredients
- rolling - using a rolling pin to evenly flatten the dough.
- cutting - using equipment to create shapes out of the dough.
- baking - cooking the biscuits in an oven.

#### Nutritional information



#### Healthy eating



### Design and Technology Knowledge Organiser - Year 3



#### Key Skills

IDEAs	<b>Investigate</b>	You will investigate a range of existing products and analyse the usefulness of their intended purpose.
	<b>Disassemble</b>	You will investigate products to understand how they work.
	<b>Evaluate</b>	Following investigation and disassembly you will assess whether the product fits its original purpose and make suggestions to adapt.
FPTs	<b>Focused Practical Tasks</b>	During the design process you will complete a series of small tasks intended to prepare you for your final make.
DME	<b>Design</b>	You will follow a design criteria, making informed choices and design decisions for your final make.
	<b>Make</b>	You will make your final product, following your design criteria.
	<b>Evaluate</b>	You will evaluate your own and your peers' final products. You will consider whether your product has achieved its intended purpose. Finally, you will suggest adaptations.

**FOOD SAFETY BASICS FOR KIDS IN THE KITCHEN**

- Wash hands with soap and water before and after handling food.
- Always use with adult supervision.
- Always use clean utensils.
- Clean all countertops and dishes before and after cooking.
- Wash hands before and after it's time to eat.
- Food safety is key.
- Always use with adult supervision.
- Wash hands with soap, keep water warm, and after handling food.
- Always use clean utensils.

Vocabulary	Definition	Question to consider
User	is person who uses or operates something	Have the needs of the user been identified and met (or was it designed with no one in mind?)
Purpose	the reason for which something is done or created or for which something exists	Does it have a clear purpose?
Function	work or operate in a proper or particular way	Does it work or function (or is it ornamental)?
Innovation	is a new method, idea, product	Is the product innovative and original?
Authentic	original	Is the product authentic or is it a gimmick?



Stick in your new knowledge organisers.

What I know now

What I currently know



Our topic links with our class book because Willy Wonka uses design and technology to invent sweets in his chocolate factory.



Wednesday 3rd November

IDEAs- LO: to explore quirky  
objects.

What is it?

Who is its  
user?

How is it  
used?



What is its  
function?

Is it fit for  
purpose?

*Common Language - Design and Technology*

*Your understanding*

*Design*

*Make*

*Focused practical  
tasks (FTPS)*

*Evaluate*

*Technical*

<i>User</i>	
<i>Purpose</i>	
<i>Function</i>	
<i>Innovation</i>	
<i>Authentic</i>	

*Draw your object here.*



Thursday 4th November

Memorable Experience

Thursday 4<sup>th</sup> November

Memorable Experience: Katie's Kids' Kitchen



Today we \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

One thing I would like to find out more about is \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The thing I enjoyed the most was \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I would like to develop my \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Wednesday 10th November

IDEAs - LO: to evaluate products.

# Healthy Biscuits: 6 Big Questions

Who?

Where?

What?

Why?

When?

How?

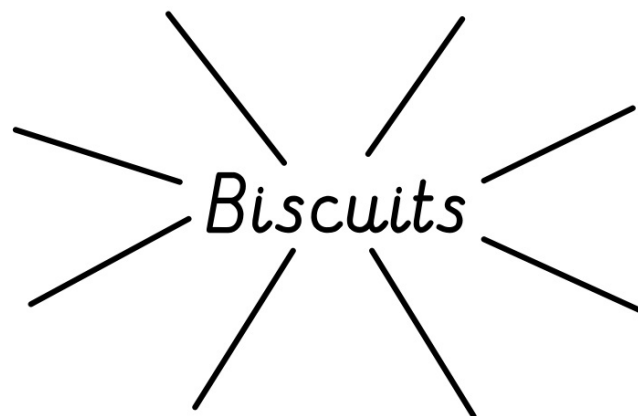


*What is a biscuit?*



*When do we eat them and why?*

How many different types of biscuit can you and your partner think of?





*Which of these biscuits  
have you tried before?*



Let's have a go at collecting the relevant information from the packaging...

Product name																					
Weight																					
Price																					
Special ingredients																					
Nutritional information	<table border="1"> <thead> <tr> <th colspan="5">Each serving contains</th> </tr> <tr> <th>Energy</th> <th>Fat</th> <th>Saturates</th> <th>Sugars</th> <th>Salt</th> </tr> </thead> <tbody> <tr> <td>%</td> <td>%</td> <td>%</td> <td>%</td> <td>%</td> </tr> <tr> <td colspan="5">of your guideline daily amount</td> </tr> </tbody> </table>	Each serving contains					Energy	Fat	Saturates	Sugars	Salt	%	%	%	%	%	of your guideline daily amount				
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My rating (out of 10)																					

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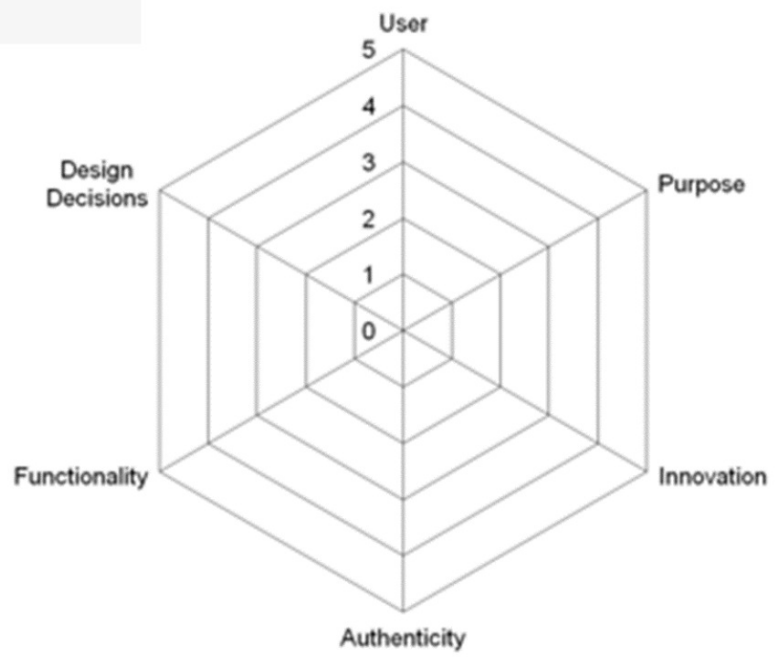


Now it's your turn...

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*Which was your favourite biscuit? Why?*



Wednesday 17th November

FPT - LO: to safely follow a  
recipe.

# Keeping Food Safe and Clean



## Sugar Biscuits



## Gingerbread



## Carrot and nutmeg cookies







Which biscuits are the healthiest? Why?



### Ingredients

- 200g unsalted butter, softened
- 200g golden caster sugar
- 1 large egg
- 1 lemon, zested
- 400g plain flour, plus extra for dusting

ADD INGREDIENT  
LISTS FOR  
GINGERBREAD  
AND COOKIES



Thursday 2nd November

IDEAs - LO: to create design  
criteria.

## Tasting Time!



Which biscuits are  
your favourite? Why?



Which biscuits are the healthiest? Why?



### Ingredients

- 200g unsalted butter, softened
- 200g golden caster sugar
- 1 large egg
- 1 lemon, zested
- 400g plain flour, plus extra for dusting

ADD INGREDIENT  
LISTS FOR  
GINGERBREAD  
AND COOKIES

# Design Criteria



What are design  
criteria?

*Project title: Healthy Biscuits*

*Idea - what are you designing?*

*Who is the intended outcome for?*

What is the intended purpose of your design?

What are the three most important design elements?



How could we make the biscuits healthier?



ADD INGREDIENT  
LIST FOR  
GINGERBREAD

### Ingredients

- 200g unsalted butter, softened
- 200g golden caster sugar
- 1 large egg
- 1 lemon, zested
- 400g plain flour, plus extra for dusting