



The BIG Picture

Our pupils have encountered and enjoyed many healthy snacks at home and at school. This unit of study takes that awareness of preference and encourages the children to consider taste and begin to develop an understanding in the source of our favourite foods.

NC Objectives- Key Stage Pupils should be taught:

- * Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].
- * Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
- * Explore and evaluate a range of existing products.
- * Use basic principles of a healthy and varied diet to prepare dishes.
- * Understand where food comes from.

Key Questions

Which foods are fruits?
Which foods are vegetables?
Where do tomatoes / potatoes grow?
What is a blender for?

What do we already know? What can we already do?

Our pupils can name many fruit and vegetables from eating and helping to prepare healthy snacks in YF.

Key vocabulary & understanding:

fruit
vegetable
seed
leaf
root
stem
smoothie
healthy
carton
design
flavour
peel
slice

Specific unit outcomes

Describe fruits and vegetables and explain why they are a fruit or a vegetable.

Name a range of places that fruits and vegetables grow.

Describe basic characteristics of fruit and vegetables.

Prepare fruits and vegetables to make a smoothie.

Key Skills

Designing smoothie carton packaging by-hand or on ICT software.
Chopping fruit and vegetables safely to make a smoothie.
Identifying if a food is a fruit or a vegetable.
Learning where and how fruits and vegetables grow.
Tasting and evaluating different food combinations.
Describing appearance, smell and taste.
Suggesting information to be included on packaging.

Key Knowledge

To understand the difference between fruits and vegetables.
To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber).
To know that a blender is a machine which mixes ingredients together into a smooth liquid.
To know that a fruit has seeds and a vegetable does not. To know that fruits grow on trees or vines.
To know that vegetables can grow either above or below ground.
To know that vegetables can come from different parts of the plant.





The **BIG** Picture

In this unit of study our children will learn to consider purpose before choosing a joining method. They will also importantly learn what happens when wrong joining choices are made.

What do we already know? What can we already do?

Our pupils have used different joining techniques during YF, including taping and gluing.

Key vocabulary & understanding:

decorate
design
fabric
glue
model
hand puppet
safety pin
staple
stencil
template

NC Objectives- Key Stage Pupils should be taught:

- * Design purposeful, functional, appealing products for themselves and other users based on design criteria.
- * Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.
- * Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).
- * Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
- * Evaluate their ideas and products against design criteria.

Key Questions

What do we mean by joining?
How have these items been joined (staples, tape, glue etc)?
What is a template?
Describe this fabric.

Specific unit outcomes

Join fabrics together using pins, staples or glue.
Design a puppet and use a template.
Join their two puppets' faces together as one.
Decorate a puppet to match their design.

Key Skills

Using a template to create a design for a puppet.
Cutting fabric neatly with scissors.
Using joining methods to decorate a puppet.
Sequencing steps for construction.
Reflecting on a finished product, explaining likes and dislikes.

Key Knowledge

To know that 'joining technique' means connecting two pieces of material together.
To know that there are various temporary methods of joining fabric by using staples, glue or pins.
To understand that different techniques for joining materials can be used for different purposes.
To understand that a template (or fabric pattern) is used to cut out the same shape multiple times.
To know that drawing a design idea is useful to see how an idea will look.





The BIG Picture

While playing with toy cars and vehicles is familiar to our pupils, the understanding of how their key mechanisms operate is not. This fun DT activity will help them to understand how wheels and axles operate, enabling them to design and make their own moving vehicle.



What do we already know? What can we already do?

Our pupils know, from free and structured play in YF, that vehicles have wheels and wheels enable them to travel.

Key vocabulary & understanding:

axle
axle holder
chassis
diagram
dowel
equipment
mechanism
wheel

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- * Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.
- * Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing.
- * Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
- * Explore and evaluate a range of existing products.
- * Evaluate their ideas and products against design criteria.
- * Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Key Questions

What is an axle / axle holder?
What is a chassis?
How do wheels spin?
What do we mean by fix?

Specific unit outcomes

Explain that wheels move because they are attached to an axle.
Recognise that wheels and axles are used in everyday life, not just in cars.
Identify and explain vehicle design flaws using the correct vocabulary.
Design a vehicle that includes functioning wheels, axles and axle holders.
Make a moving vehicle with working wheels and axles.
Explain what must be changed if there are any operational issues.

Key Skills

Designing a vehicle that includes wheels, axles and axle holders, which will allow the wheels to move.
Creating clearly labelled drawings that illustrate movement.
Adapting mechanisms.
Testing mechanisms, identifying what stops wheels from turning, knowing that a wheel needs an axle in order to move.

Key Knowledge

To know that wheels need to be round to rotate and move.
To understand that for a wheel to move it must be attached to a rotating axle.
To know that an axle moves within an axle holder which is fixed to the vehicle or toy.
To know that the frame of a vehicle (chassis) needs to be balanced.
To know some real-life items that use wheels.

Links with computing:

Digitally painting a flag for their car (extension activity))