

DT – Year 1 – Summer 2

Food: fruit and vegetables (4 lessons)

Mechanisms: wheels and axels (lesson 1, 3 and 4)

<p>Previous Learning / sticky knowledge</p>	<p><u>EYFS: Cooking and nutrition – Soup</u></p> <p>Physical development Develop small motor skills so that they can use a range of tools competently, safely and confidently. <u>ELG: Fine Motor Skills:</u> Use a range of small tools, including scissors, paint brushes and cutlery.</p> <p>Communication and language Learn new vocabulary. Use new vocabulary throughout the day. <u>ELG: Speaking:</u> Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.</p> <p>Personal, social and emotional development Know and talk about the different factors that support their overall health and wellbeing: healthy eating. <u>ELG: Managing self:</u> Manage their own basic hygiene and personal needs, including...understanding the importance of healthy food choices</p> <p>Understanding the world Explore the natural world around them. <u>ELG: The Natural World:</u> Explore the natural world around them, making observations and drawing pictures of animals and plants.</p> <p><u>This unit:</u> 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.</p>	<p><u>EYFS:- seasonal projects – sliding pictures</u></p> <p>Physical development Develop small motor skills so that they can use a range of tools competently, safely and confidently. <u>ELG: Fine Motor Skills:</u> Use a range of small tools, including scissors, paint brushes and cutlery.</p> <p>Expressive arts and design Explore, use and refine a variety of artistic effects to express ideas and feelings. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills. <u>ELG: Creating with Materials:</u> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <u>ELG: Creating with Materials:</u> Make use of props and materials when role playing characters in narratives and stories.</p> <p><u>Year 1 – mechanisms – making a moving book</u> Identify whether a mechanism is a side-to-side slider or an up-and-down slider and determine what movement the mechanism will make. Clearly label drawings to show which parts of their design will move and in which direction. Make a picture, which meets the design criteria, with parts that move purposefully as planned. Evaluate the main strengths and weaknesses of their design and suggest alterations.</p> <p><u>This unit:</u> 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.</p>
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		Make a moving vehicle with working wheels and axles. Explain what must be changed if there are any operational issues.		
	Curiosity questions	Substantive knowledge	Disciplinary Knowledge	Key Vocabulary
Wk 1	What is a fruit? What is a vegetable?	To understand the difference between fruits and vegetables. To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber).	Identifying if a food is a fruit or a vegetable.	Fruit Vegetable Seed
<u>Retrieval Practice Questions</u> Last week: Last term: picture of glue, safety pin and stapler. Which one is a safety pin? Last year: what am I doing if I chop up a carrot?				
Wk 2	Where do fruit and vegetable grow?	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 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.	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.	Fruit Leaf Root Seed Stem Vegetable
<u>Retrieval Practice Questions</u> Last week: picture of an apple. Is this a fruit or veg? Last term: what method of joining materials needs drying time? Glueing, pinning, stapling Last year: What is a seed?				
Wk 3	What shall I put in my smoothie?	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.	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.	Fruit Smoothie Healthy Vegetables

	<u>Retrieval Practice Questions</u> Last week: picture of a potato. Where does it grow? Last term: share a picture of a sewn hand puppet. Tell a partner the process of making it. Last year: 3 pictures of fruits and veg. name them.			
Wk 4	How can I package my smoothie?	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.	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.	Fruit Smoothie Healthy Vegetables
	<u>Retrieval Practice Questions</u> Last week: What is taste testing? Last term: what are the good and bad points of using safety pins? Last year: name the equipment – knife, chopping board.			
Wk 5	How do wheels move?	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.	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.	Axle Axle holder Diagram Mechanism Wheel
	<u>Retrieval Practice Questions</u> Last week: are smoothies good for you? Last term: what does evaluate mean? Last year: have a prepared moving picture. Describe its moving action.			

Wk 6	What must a vehicle have?	<p>To know that wheels need to be round to rotate and move.</p> <p>To understand that for a wheel to move it must be attached to a rotating axle.</p> <p>To know that an axle moves within an axle holder which is fixed to the vehicle or toy.</p> <p>To know that the frame of a vehicle (chassis) needs to be balanced.</p> <p>To know some real-life items that use wheels.</p>	<p>Designing a vehicle that includes wheels, axles and axle holders, which will allow the wheels to move.</p> <p>Creating clearly labelled drawings that illustrate movement.</p> <p>Adapting mechanisms.</p> <p>Testing mechanisms, identifying what stops wheels from turning, knowing that a wheel needs an axle in order to move.</p>	<p>Axle</p> <p>Axle holder</p> <p>Chassis</p> <p>Mechanism</p> <p>Wheel</p>
<p><u>Retrieval Practice Questions</u></p> <p>Last week: How does a wheel work?</p> <p>Last term: True or false: Design is when we test if our product works.</p> <p>Last year: What is a permanent join?</p>				
Wk 7	How can I test my car?	<p>To know that wheels need to be round to rotate and move.</p> <p>To understand that for a wheel to move it must be attached to a rotating axle.</p> <p>To know that an axle moves within an axle holder which is fixed to the vehicle or toy.</p> <p>To know that the frame of a vehicle (chassis) needs to be balanced.</p> <p>To know some real-life items that use wheels.</p>	<p>Designing a vehicle that includes wheels, axles and axle holders, which will allow the wheels to move.</p> <p>Creating clearly labelled drawings that illustrate movement.</p> <p>Adapting mechanisms.</p> <p>Testing mechanisms, identifying what stops wheels from turning, knowing that a wheel needs an axle in order to move.</p>	<p>Axle</p> <p>Axle holder</p> <p>Chassis</p> <p>Dowel</p> <p>Mechanism</p> <p>Wheel</p>
<p><u>Retrieval Practice Questions</u></p> <p>Last week: name the parts of a car.</p> <p>Last term: why should you be careful when using a needle?</p> <p>Last year: what is a slider?</p>				
<p>WOW Experience Days</p>		<p>•</p>		