



**Design Technology – Year 2 – Medium Term Plan**  
**Autumn 2, Unit 1: Wheels and Axles**



Lesson	Learning Objective	Success Criteria	National Curriculum Links	Vocabulary	Resources
One: How do wheels move?	To understand how wheels move.	<ul style="list-style-type: none"> <li>- I can identify what mechanism makes a toy or vehicle roll forwards</li> <li>- I can recall that in order for a wheel to move it must be attached to an axle.</li> <li>- I can draw and label a diagram of an axle, wheel and axle holder.</li> </ul>	Evaluate Explore and evaluate a range of existing products.  Technical Knowledge. <ul style="list-style-type: none"> <li>- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> </ul>	<ul style="list-style-type: none"> <li>- Axle</li> <li>- Axle holder</li> </ul>	<ul style="list-style-type: none"> <li>- Items that have wheels, such as bicycles, tricycles, trundle wheels, toy cars, skateboards and trolleys (arranged around the classroom – see Attention grabber).</li> <li>- Equipment for the children to experiment with (per small group):</li> <li>- selection of straws;</li> <li>- paper;</li> <li>- glue or masking tape;</li> <li>- scissors.</li> </ul>
Two: Fixing broken wheels	To identify what stops wheels from turning.	I can recall that a wheel needs an axle in order to move.  I can fix a design so that the wheel can move.  I can use appropriate vocabulary to describe which parts are moving or not.	Evaluate <ul style="list-style-type: none"> <li>- Explore and evaluate a range of existing products.</li> </ul> Technical knowledge <ul style="list-style-type: none"> <li>- Pupils should be taught to:</li> <li>- Explore and use mechanisms in their product.</li> </ul>	<ul style="list-style-type: none"> <li>- axle</li> <li>- axle holder</li> <li>- equipment</li> <li>- mechanism</li> <li>- wheel</li> </ul>	Presentation: Quizmaster.  Link: Sid the science kid - How wheels work on VideoLink
Three: Designing a vehicle	To design a moving vehicle.	I can recall what makes a wheel and an axle work.  I can design a moving vehicle.  I can label my design using appropriate vocabulary.	<ul style="list-style-type: none"> <li>- Design</li> <li>- Pupils should be taught to:</li> <li>- Design purposeful, functional, appealing products for themselves and other users based on design criteria.</li> <li>- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and technology.</li> </ul>	<ul style="list-style-type: none"> <li>- axle</li> <li>- axle holder</li> <li>- equipment</li> <li>- mechanism</li> <li>- wheel</li> </ul>	<ul style="list-style-type: none"> <li>- Presentation: Gimme five and Vehicles.</li> <li>- Audio: Soundtrack: Mission Impossible.</li> <li>- Ruler.</li> <li>- Materials for making vehicles:</li> <li>- body: cardboard tubes, cardboard boxes or yoghurt pots;</li> <li>- axle: straws or dowel (cut to size);</li> <li>- wheels: wooden wheels, card discs or plastic cotton reels.</li> </ul>

<p>Four: Wacky Races</p>	<p>To build a moving vehicle.</p>	<ul style="list-style-type: none"> <li>- I can make a wheel and axle mechanism.</li> <li>- I can evaluate my design to make it even better.</li> <li>-</li> </ul>	<p><b>Design</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</li> </ul> <p><b>Make</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• Select from and use a range of tools and equipment to perform practical tasks.</li> </ul> <p><b>Evaluate</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• Evaluate their ideas and products against design criteria.</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- axle</li> <li>- axle holder</li> <li>- equipment</li> <li>- mechanism</li> <li>- wheel</li> </ul>	<ul style="list-style-type: none"> <li>- Design</li> <li>- Pupils should be taught to:</li> <li>- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</li> <li>- Make</li> <li>- Pupils should be taught to:</li> <li>- Select from and use a range of tools and equipment to perform practical tasks.</li> <li>- Evaluate</li> <li>- Pupils should be taught to:</li> <li>- Evaluate their ideas and products against design criteria.</li> </ul>
<p>Assessment:</p>	<p>End of unit quiz: name the parts, what is a car chassis, how do wheels spin, what does fix mean, what does accurate mean.</p>				



*Design and Technology— Year 2 – Medium Term Plan  
Spring 2, Unit 2: Pouches*



<i>Lesson</i>	<i>Learning Objective</i>	<i>Success Criteria</i>	<i>National Curriculum Links</i>	<i>Vocabulary</i>	<i>Resources</i>
<i>One: Running stitch</i>	<i>To sew a running stitch</i>	<ul style="list-style-type: none"> <li>- <i>I can thread a needle.</i></li> <li>- <i>I can sew a running stitch.</i></li> <li>- <i>I can use neat and evenly spaced stitches to join fabric.</i></li> <li>-</li> </ul>	<p><i>Make</i></p> <p><i>Pupils should be taught to: Select from and use a range of tools and equipment to perform practical tasks.</i></p>	<ul style="list-style-type: none"> <li>- <i>decorate</i></li> <li>- <i>fabric</i></li> <li>- <i>fabric glue</i></li> <li>- <i>knot</i></li> <li>- <i>needle</i></li> <li>- <i>needle threader</i></li> <li>- <i>running stitch</i></li> <li>- <i>sew</i></li> <li>- <i>template</i></li> <li>- <i>thread</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Children's needles (larger than normal).</i></li> <li>• <i>Thread (thick but not woolly).</i></li> <li>• <i>Small pieces of felt.</i></li> <li>• <i>Needle threading tool (optional).</i></li> </ul>
<i>Two: Using a template</i>	<i>To sew a running stitch</i>	<ul style="list-style-type: none"> <li>- <i>I can remember how to use a template.</i></li> <li>- <i>I can cut fabric neatly.</i></li> <li>- <i>I can pin fabric accurately.</i></li> <li>- <i>I can design a pouch.</i></li> <li>-</li> </ul>	<p><i>Design</i></p> <p><i>Pupils should be taught to: Design purposeful, functional, appealing products for themselves and other users.</i></p>	<ul style="list-style-type: none"> <li>- <i>decorate</i></li> <li>- <i>fabric</i></li> <li>- <i>fabric glue</i></li> <li>- <i>knot</i></li> <li>- <i>needle</i></li> <li>- <i>needle threader</i></li> <li>- <i>running stitch</i></li> <li>- <i>sew</i></li> <li>- <i>template</i></li> <li>- <i>thread</i></li> </ul>	<p><i>Presentation: Brain dump.</i></p> <ul style="list-style-type: none"> <li>- <i>Scissors (ideally, fabric scissors).</i></li> <li>- <i>Pins.</i></li> <li>- <i>Felt – enough for the children to cut out the two templates from the Activity: Pouch templates.</i></li> </ul>

<p>Three: Making a pouch</p>	<p>To join fabrics using a running stitch.</p>	<ul style="list-style-type: none"> <li>• I can sew neat, even stitches.</li> <li>• I tie a knot at either end of the thread.</li> <li>• I can design decorations for my product</li> </ul>	<p><b>Make</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• Select from and use a wide range of materials and components, including construction materials, textiles and ingredients according to their characteristics.</li> </ul>	<ul style="list-style-type: none"> <li>- decorate</li> <li>- fabric</li> <li>- fabric glue</li> <li>- knot</li> <li>- needle</li> <li>- needle threader</li> <li>- running stitch</li> <li>- sew</li> <li>- template</li> <li>- thread</li> </ul>	<p>Presentation: Speak like an expert. Children's needles (larger than normal). Threads (thick but not woolly). Needle threader (optional). Thimble (optional). Scissors (ideally, textile scissors). Example pieces of sewing to show what can go wrong (see Attention grabber): Example 1: Felt pieces are not aligned properly before the sides are sewn up. Example 2: Stitches are of varying sizes – some very long, some tiny, with large gaps in between. Example 3: No knots are</p>
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					<p>tyed at the thread ends so that the running stitch is loose and falling apart.</p>
Four:	Decorating a pouch	<ul style="list-style-type: none"> <li>- can join items using fabric glue or stitching.</li> <li>- I can decorate fabric using different items.</li> <li>- I can evaluate my own designs.</li> </ul>	<p>Evaluate</p> <p>Pupils should be taught to:</p> <p>Evaluate their ideas and products against a design criteria.</p>	<ul style="list-style-type: none"> <li>- decorate</li> <li>- fabric</li> <li>- fabric glue</li> <li>- knot</li> <li>- needle</li> <li>- needle threader</li> <li>- running stitch</li> <li>- sew</li> <li>- template</li> <li>- thread</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- <i>Presentation:</i></li> <li>- <i>Quizmaster.</i></li> <li>- Fabric glue or PVA glue (and application utensils).</li> <li>- Felt.</li> <li>- Scissors (ideally, fabric scissors).</li> <li>- Sequins or other decorative items.</li> <li>- If children are to decorate the pouch flap with stitching: <ul style="list-style-type: none"> <li>o children's needles (larger than normal).</li> <li>o thread (thick but not woolly).</li> <li>o needle threading tool</li> <li>o thimble.</li> </ul> </li> <li>-</li> </ul>

Assessment: What do we mean by joining technique? What is a template? Which picture shows safety pins? Which is a method of joining fabric? What is the name of this stitch? What is the name of the tool used to sew? What must you do after sewing the final stitch? What tool can you use to protect your fingers? What is a pouch?



*Design and Technology – Year 2 – Medium Term Plan  
Summer 2, Unit 3: Cooking and nutrition: Balanced diet.*

<i>Lesson</i>	<i>Learning Objective</i>	<i>Success Criteria</i>	<i>National Curriculum Links</i>	<i>Vocabulary</i>	<i>Resources</i>
<i>One: Food groups</i>	<i>To recognise food and their food groups.</i>	<ul style="list-style-type: none"> <li>• <i>I can name the five food groups.</i></li> <li>• <i>I can match foods with the food group they belong to.</i></li> <li>• <i>I can explain how much of each food group I should have every day.</i></li> </ul>	<p><b><i>Design and technology Cooking and nutrition</i></b>  <i>Pupils should be taught to:</i></p> <ul style="list-style-type: none"> <li>• <i>Use the basic principles of a healthy and varied diet to prepare dishes.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>carbohydrates</i></li> <li>• <i>dairy</i></li> <li>• <i>fruit</i></li> <li>• <i>oils</i></li> <li>• <i>proteins</i></li> <li>• <i>spreads</i></li> <li>• <i>vegetables</i></li> </ul>	<ul style="list-style-type: none"> <li>- <i>Presentation: Balanced scales.</i></li> <li>- <i>Presentation: A balanced plate.</i></li> <li>- <i>Balance scales (one for demonstration – optional, see Attention grabber).</i></li> <li>- <i>Weights (enough to balance and unbalance the scale – optional, see Attention grabber).</i></li> <li>- <i>Flipchart.</i></li> <li>- <i>Glue sticks (one each).</i></li> <li>- <i>Scissors (one each).</i></li> <li>- <i>Different areas of the classroom labelled with the food groups (see Wrapping up).</i></li> <li>- <i>Link: <a href="#">NHS - Eatwell guide</a></i></li> </ul>
<i>Two: Balanced Meals</i>	<i>To identify the balance of food groups in a meal.</i>	<ul style="list-style-type: none"> <li>• <i>I can identify foods I like.</i></li> <li>• <i>I can explain the food groups in a meal.</i></li> <li>• <i>I can plan a balanced menu.</i></li> </ul>	<p><b><i>Cooking and nutrition</i></b>  <i>Pupils should be taught to:</i></p> <p><i>Use the basic principles of a healthy and varied diet to prepare dishes.</i></p>	<ul style="list-style-type: none"> <li>- <i>Balanced</i></li> <li>- <i>Diet</i></li> <li>- <i>menu</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Presentation: Gimme five!</i></li> <li>• <i>Presentation: Balanced meals.</i></li> <li>• <i>Presentation: Balanced diet restaurant.</i></li> <li>• <i>Quiz: Make this meal more balanced.</i></li> </ul>

					<ul style="list-style-type: none"> <li>• Example menus from restaurants (see Main event).</li> </ul>
<p>Three: Preparing ingredients</p>	<p>To identify an appropriate piece of equipment to prepare a given food.</p>	<ul style="list-style-type: none"> <li>- I can identify equipment used for preparing food.</li> <li>- I can practise food preparation skills using a range of equipment.</li> <li>- I can justify using a piece of equipment with a type of food.</li> </ul>	<p><b>Make</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].</li> </ul>	<ul style="list-style-type: none"> <li>• chopping board</li> <li>• cut</li> <li>• grate</li> <li>• grater</li> <li>• scissors</li> <li>• snip</li> <li>• spread</li> <li>• table knife</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Presentation: Agree or disagree?</i></li> <li>• <i>Presentation: Equipment.</i></li> <li>• <i>Presentation: Preparation skills.</i></li> <li>• Scissors (one each).</li> <li>• Glue stick (one between two).</li> <li>• An extra adult to supervise a skills table (see Main event).</li> <li>• Equipment to practise cutting skills (see Main event): <ul style="list-style-type: none"> <li>○ a table knife;</li> <li>○ a fork;</li> <li>○ a green chopping board;</li> <li>○ foods to cut, such as pepper, boiled egg and avocado flesh.</li> </ul> </li> <li>• Equipment to practise grating skills (see Main event): <ul style="list-style-type: none"> <li>○ 1 box grater;</li> <li>○ 1 white chopping board;</li> </ul> </li> </ul>

					<ul style="list-style-type: none"><li>○ 1 green chopping board;</li><li>○ foods to grate, such as cucumber and cheese.</li><li>• Equipment to practise snipping skills (see Main event):<ul style="list-style-type: none"><li>○ 2 pairs of scissors;</li><li>○ 2 bowls or cups to snip into;</li><li>○ 2 green chopping boards;</li><li>○ foods to snip, such as coriander, parsley and spring onions.</li></ul></li><li>• Equipment to practise spreading skills (see Main event):<ul style="list-style-type: none"><li>○ 2 spoons;</li><li>○ 2 table knives;</li><li>○ foods to spread, such as hummus or mayonnaise.</li></ul></li><li>• A large bowl to collect prepared foods (see Main event).</li></ul>
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<p>Four: Taste testing ingredients</p>	<p>To select balanced combinations of ingredients.</p>	<ul style="list-style-type: none"> <li>• I can select foods from specific food groups.</li> <li>• I can describe the taste of different foods.</li> <li>• I can explain why I have chosen to put foods together.</li> </ul>	<p>Make</p> <p>Pupils should be taught to:</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p>	<ul style="list-style-type: none"> <li>• combination</li> <li>• design brief</li> <li>• feel</li> <li>• smell</li> <li>• taste</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Presentation: Speak like an expert.</i></li> <li>• <i>Presentation: Design brief.</i></li> <li>• <i>Presentation: Describing flavours.</i></li> <li>• Flipchart (see Attention grabber).</li> <li>• Plates of fruits and vegetables (one sample of each food per child): <ul style="list-style-type: none"> <li>○ avocado;</li> <li>○ spring onion;</li> <li>○ coriander;</li> <li>○ parsley;</li> <li>○ pepper;</li> <li>○ cucumber.</li> </ul> </li> <li>• Plates of protein (three samples of each food per child): <ul style="list-style-type: none"> <li>○ boiled egg;</li> <li>○ hummus.</li> </ul> </li> <li>• Plates of dairy (three samples of each food per child): <ul style="list-style-type: none"> <li>○ cheddar cheese;</li> <li>○ cream cheese.</li> </ul> </li> <li>• Plastic spoons (one each).</li> <li>• Cocktail sticks or forks (one each).</li> </ul>
<p>Five: Planning recipes</p>	<p>To design based on criteria</p>	<p>I can follow design criteria.</p>	<p>Cooking and nutrition</p> <p>Pupils should be taught to:</p> <p>Use the basic principles of a healthy and varied diet to prepare dishes.</p>	<ul style="list-style-type: none"> <li>- Design</li> <li>- ingredients</li> </ul>	<ul style="list-style-type: none"> <li>- <i>Presentation: Odd one out.</i></li> <li>- <i>Presentation: Design brief.</i></li> </ul>

		<p>I can design three different wraps.</p> <p>I can justify the choice I have made</p> <p>-</p>			<ul style="list-style-type: none"> <li>- <i>Presentation: Designing wraps.</i></li> <li>- Design brief on flipchart page from <i>Lesson 4: Taste testing ingredients</i> (see Attention grabber).</li> <li>- Shop-bought wraps (one per table – see Attention grabber).</li> <li>- Colouring pencils (a selection per table – see Main event).</li> <li>-</li> </ul>
<p>Six: Creating and evaluating wraps</p>	<p>To evaluate a dish based on a design criteria.</p>	<ul style="list-style-type: none"> <li>- I can select the ingredients for my recipe.</li> <li>- I can identify the equipment needed to prepare different foods.</li> <li>- I can decide if I like different wraps and choose my favourite.</li> <li>-</li> </ul>	<p>Cooking and nutrition</p> <p>Pupils should be taught to:</p> <p>Use the basic principles of a healthy and varied diet to prepare dishes.</p>	<ul style="list-style-type: none"> <li>• appearance</li> <li>• evaluate</li> <li>• review</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Presentation: Opposites.</i></li> <li>• <i>Presentation: Design brief.</i></li> <li>• <i>Presentation: Wrap review.</i></li> </ul> <p><b>Equipment for preparing the wraps (this should be completed ahead of the lesson – see Teacher knowledge).</b></p> <ul style="list-style-type: none"> <li>• An extra class adult to supervise.</li> <li>• Equipment for cutting foods: <ul style="list-style-type: none"> <li>○ 1 table knife;</li> <li>○ 1 fork;</li> <li>○ 1 green chopping board;</li> <li>○ foods to cut, such as pepper, boiled egg and avocado flesh.</li> </ul> </li> </ul>

					<ul style="list-style-type: none"><li>• <i>Equipment for grating foods:</i><ul style="list-style-type: none"><li>○ 1 box grater;</li><li>○ 1 white chopping board;</li><li>○ 1 green chopping board;</li><li>○ foods to grate, such as cucumber and cheese.</li></ul></li><li>• <i>Equipment for snipping foods:</i><ul style="list-style-type: none"><li>○ 2 pairs of scissors;</li><li>○ 2 bowls or cups to snip into;</li><li>○ 2 green chopping boards;</li><li>○ foods to snip, such as coriander, parsley and spring onions.</li></ul></li><li>• <i>Equipment for spreading foods:</i><ul style="list-style-type: none"><li>○ 2 spoons;</li><li>○ 2 table knives;</li><li>○ foods to spread, such as hummus or cream cheese.</li></ul></li></ul>
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					<ul style="list-style-type: none"> <li>• Tortillas or sandwich wraps (one each).</li> </ul> <p><b>Equipment for evaluating the wraps (to be used during the lesson).</b></p> <ul style="list-style-type: none"> <li>• The children's completed wraps (see Main event).</li> <li>• A teacher wrap for modelling evaluation (see Main event).</li> <li>• Flipchart.</li> </ul>
<p><i>Assessment:</i></p> <p>1. What do we mean by diet? It is important to... What skill should you use to prepare a spring onion? What is a food's appearance? Create a balanced meal?</p>					