

Design and Technology – Y1 KAPOW 2024

<p align="center"><u>Honesty</u></p> <p>Learning to communicate with confidence Asking for help when necessary Receiving criticism kindly</p>	<p align="center"><u>Love</u></p> <p>Offering to help</p> <p>Giving praise to self and others</p>	<p align="center"><u>Forgiveness</u></p> <p>Being able to accept kind criticism Learn to be patient when sharing</p>	<p align="center"><u>Respect</u></p> <p>Appreciating the efforts of others Looking after equipment, materials, the classroom environment and each other's work</p>	<p align="center"><u>Cultural Capital Opportunities</u></p> <p>Investigating products in the school environment, the locality and at home Learning about the impact of nutrition on health Learn about significant designers who have shaped the locality, the UK and the world- Learning where food comes from Learning to use unfamiliar equipment and materials</p>			
<p align="center"><u>Love Of Language</u></p> <p><u>Reading:</u> Reading technical and other key vocabulary Reading instructions Reading age appropriate information about designers and products Reading peers' writing</p> <p><u>Listening:</u> Listening to instructions Listening to video clips Listening to partners and team members</p> <p><u>Speaking:</u> Communicating with partners and team members Asking questions Using technical and other key vocabulary Describing and explaining ideas, decisions and opinions</p> <p><u>Writing:</u> Labelling drawings Writing technical and other key vocabulary Writing instructions Writing product evaluations</p>	<p align="center"><u>Aspirations</u></p> <p>Identify the ways a product will meet the design criteria</p> <p>Identify the positive effect the product will have on the intended user</p> <p>Self-evaluate their use of equipment and skills and set their own targets for improvement</p>	<p align="center"><u>Bringing Learning To Life</u></p> <p>Evaluating a variety of existing products</p> <p>Visits to the locality to investigate products</p> <p>Teacher to bring in photos for children to sort.</p> <p>Practical use of a range of techniques and materials</p> <p>Making products that function and are appealing</p>	<p align="center"><u>Emotional Well-Being</u></p> <p>Learning to be supportive and cooperative</p> <p>Being proud of what they have accomplished</p>	<p align="center"><u>Resilience</u></p> <p>Being willing to take risks</p> <p>Persevering with new techniques and equipment</p> <p>Know that practise brings improvement</p>		<p align="center"><u>Valuing Our Diversity</u></p> <p>Learning about foods from around the world</p> <p>Finding out about and valuing people's preferences</p>	<p align="center"><u>Respect and Responsibility</u></p> <p>Listening to safety instructions and using equipment with care</p> <p>Looking after equipment, materials, the classroom / local environment and each other's work</p> <p>Giving praise (to self as well as others)</p> <p>Giving criticism kindly</p> <p>Accept kind criticism</p> <p>Asking for help when necessary</p> <p>Offer to help</p> <p>Learn to be patient when sharing</p>

What will they learn?		In what order?			End points
Key Concepts	Key Skills	Autumn	Spring	Summer	
<p>Design:</p> <ul style="list-style-type: none"> 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. <p>Make:</p> <ul style="list-style-type: none"> 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. <p>Evaluate:</p> <ul style="list-style-type: none"> Explore and evaluate a range of existing products. Evaluate their ideas and products against design criteria. <p>Technical Knowledge:</p> <ul style="list-style-type: none"> Build structures, exploring how 	<p>Structures:</p> <p>Build structures such as windmills and chairs, exploring how they can be made stronger, stiffer and more stable. Recognise areas of weakness through trial and error.</p> <p>Mechanisms:</p> <p>Introduce and explore simple mechanisms, such as sliders, wheels and axles in their designs. Recognise where mechanisms such as these exist in toys and other familiar products.</p> <p>Textiles:</p> <p>Explore different methods of joining fabrics and experiment to determine the pros and cons of each technique. KS2 only* Create functional electrical products that use series circuits,</p> <p>Cooking and Nutrition:</p> <p>Learn about the basic rules of a healthy and varied diet to create dishes. Understand where food comes from, for example plants and animals.</p>	<p>Mechanisms</p> <p>Making a moving story book (4 lessons)</p> <p>Experiment with sliders before planning and making three pages of a moving story book, based on a familiar story, drawing the page backgrounds, creating the moving parts and assembling it.</p> <p>https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/mechanisms-making-a-moving-story-book/</p>	<p>Structures:</p> <p>Constructing a windmill (4 lessons)</p> <p>Construct a windmill to complete a request from a user. Develop an understanding of different types of windmill, how they work and their key features. Begin to use technical skills such as making evenly spaced cuts and adding weight to ensure a successful structure.</p> <p>https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/new-structures-constructing-a-windmill/</p> <p>Textiles:</p> <p>Puppets (4 lessons)</p> <p>Explore different ways of joining fabrics before creating hand puppets based upon characters from a well-known fairytale. Develop technical skills of cutting, glueing, stapling and pinning.</p> <p>https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/textiles-puppets/</p>	<p>Mechanisms</p> <p>Wheels and axles (4 lessons)</p> <p>Learn about the main components of a wheeled vehicle. Develop understanding of how wheels, axles and axle holders work; problem-solve why wheels won't rotate; to design and build their own vehicle designs. https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/mechanisms-wheels-and-axles/</p> <p>Cooking and Nutrition Smoothies (6 lessons)</p> <p>Handle and explore fruits and vegetables and learn how to identify fruit, before undertaking taste testing to establish chosen ingredients for a smoothie they will make, with</p>	<p>Autumn: Making a moving story book</p> <ul style="list-style-type: none"> 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 that meets the design criteria, with parts that move purposefully as planned. Evaluate the main strengths and weaknesses of their design and suggest alterations <p>Spring: Constructing a windmill</p> <ul style="list-style-type: none"> Follow design criteria to meet the needs of a user. Make a stable structure. Make functioning sails/blades that attach to the supporting

<p>they can be made stronger, stiffer and more stable.</p> <ul style="list-style-type: none"> • Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products • Understands where food comes from. 				<p>accompanying packaging.</p> <p>https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/cooking-and-nutrition-smoothies/</p>	<p>structure.</p> <ul style="list-style-type: none"> • Improve their windmill. <p>Puppets:</p> <ul style="list-style-type: none"> • 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. <p>Mechanisms:: Wheels and Axles</p> <ul style="list-style-type: none"> • 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
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issues

Summer:

Cooking and Nutrition:
Smoothies:

- Describe fruits and vegetables and explain how to identify fruits.
- 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.