**D&T Curriculum Overview**

Kapow offers full coverage of the KS1 and KS2 Design & Technology curriculum and we have categorised our content into five areas:

* Structures
* Mechanisms
* Electrical Systems
* Cooking and Nutrition
* Textiles

Aside from Electrical Systems, which is KS2 only, each of these acts as the focus for a topic within each year group:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Cooking and Nutrition** | **Mechanisms** | **Structures** | **Textiles** | **Electrical Systems** |
| **Y1** | Fruit and Vegetable Smoothie | Moving Storybook: Sliders  Wheels and Axles | Windmills | Puppets |  |
| **Y2** | A Balanced Diet | Moving Monsters  Ferris Wheels | Baby Bear’s Chair | Pouches |  |
| **Y3** | Eating Seasonally | Pneumatic Toys | Castles | Cushions | Static Electricity |
| **Y4** | Adapting a Recipe | Slingshot Cars | Pavilions | Fastenings | Torches |
| **Y5** | What Could Be Healthier? | Pop-up Books | Bridges | Stuffed Toys | Electric Greetings Cards |
| **Y6** | Come Dine With Me | Automata Toys | Playgrounds | Waistcoats | Steady Hand Games |

There are then four strands that run through each topic:

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**National Curriculum by Kapow’s themes and topics**

|  |  |  |  |
| --- | --- | --- | --- |
| Key stage 1  National Curriculum D&T subject content | D&T Strands | Kapow Topics | |
| Pupils should be taught to: |  | Year 1 | Year 2 |
| Design purposeful, functional, appealing products for themselves and other users based on design criteria | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png** | [Moving Story Books](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-1-making-a-moving-story-book/)  [Windmills](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/structures-constructing-a-windmill/)  [Puppets](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/textiles-puppets/)  [Wheels and Axles](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-wheels-and-axels/) | [Moving Monsters](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/)  [Baby Bear’s Chair](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/structures-baby-bears-chair/)  [Pouches](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/textiles/)  [Ferris Wheels](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/) |
| Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png** | [Moving Story Books](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-1-making-a-moving-story-book/)  [Windmills,](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/structures-constructing-a-windmill/) [Puppets](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/textiles-puppets/)  [Wheels and Axles](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-wheels-and-axels/) | [Moving Monsters](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/)  [Baby Bear’s Chair](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/structures-baby-bears-chair/)  [Pouches](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/textiles/)  [Ferris Wheels](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/) |
| Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png** | [Moving Story Books](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-1-making-a-moving-story-book/)  [Windmills](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/structures-constructing-a-windmill/)  [Puppets](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/textiles-puppets/)  [Wheels and Axles](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-wheels-and-axels/) | [Moving Monsters](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/)  [Baby Bear’s Chair](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/structures-baby-bears-chair/)  [Pouches](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/textiles/)  [Ferris Wheels](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/) |
| Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png** | [Moving Books](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-1-making-a-moving-story-book/)  [Windmills](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/structures-constructing-a-windmill/)  [Puppets](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/textiles-puppets/)  [Wheels and Axles](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-wheels-and-axels/)  [Smoothies](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/food-fruit-and-vegetables/) | [Moving Monsters](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/)  [Baby Bear’s Chair](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/structures-baby-bears-chair/)  [Pouches](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/textiles/)  [Ferris Wheels](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/)  [A Balanced Diet](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/food-a-balanced-diet/) |
| Explore and evaluate a range of existing products | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png** | [Moving Story Books](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-1-making-a-moving-story-book/)  [Windmills](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/structures-constructing-a-windmill/)  [Wheels and Axles](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-wheels-and-axels/)  [Smoothies](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/food-fruit-and-vegetables/) | [Moving Monsters](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/)  [Pouches](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/textiles/)  [Ferris Wheels](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/)  [A Balanced Diet](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/food-a-balanced-diet/) |
| Evaluate their ideas and products against design criteria | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png** | [Moving Story Books](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-1-making-a-moving-story-book/)  [Windmills](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/structures-constructing-a-windmill/)  [Puppets](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/textiles-puppets/)  [Wheels and Axles](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-wheels-and-axels/) | [Moving Monsters](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/)  [Baby Bear’s Chair](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/structures-baby-bears-chair/)  [Pouches](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/textiles/)  [Ferris Wheels](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/) |
| Build structures, exploring how they can be made stronger, stiffer and more stable | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | [Windmills](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/structures-constructing-a-windmill/) | [Baby Bear’s Chair](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/structures-baby-bears-chair/)  [Ferris Wheels](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/) |
| Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | [Moving Story Books](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-1-making-a-moving-story-book/)  [Wheels and Axles](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-wheels-and-axels/) | [Moving Monsters](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/)  [Ferris Wheels](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/) |
| **Cooking and Nutrition:** Use the basic principles of a healthy and varied diet to prepare dishes | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | [Fruit and Vegetable Smoothie](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/food-fruit-and-vegetables/) | [A Balanced Diet](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/food-a-balanced-diet/) |
| **Cooking and Nutrition:** Understand where food comes from | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | [Fruit and Vegetable Smoothie](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/food-fruit-and-vegetables/) | [A Balanced Diet](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/food-a-balanced-diet/) |

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| Key stage 2  National Curriculum Computing subject content | D&T Strands | Kapow Topics | | | |
| Pupils should be taught to: |  | Y3 | Y4 | Y5 | Y6 |
| 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 | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png** | [Eating Seasonally](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/food-eating-seasonally/)  Pneumatic Toys  [Castles](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/structures-constructing-a-castle/)  C[ushions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/textiles-cross-stitch/)  [Static Electricity](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/electrical-systems/) | [Slingshot Cars](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/)  Torches  [Pavilions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/structure/)  [Fastenings](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/textiles/)  [Adapting a Recipe](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/food-adapting-a-recipe/) | Bridges  [Pop-Up Books](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/mechanical-systems-making-a-pop-up-book/)  Greetings Cards  [What Could Be Healthier?](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/food-what-could-be-healthier/)  [Stuffed Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/textiles/) | Playgrounds  [Automata Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/mechanical-systems-automata-toys/)  [Come Dine With Me](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/food-come-dine-with-me/) [Waistcoats](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/textiles/)  Steady Hand Game |
| Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png** | Pneumatic Toys  [Castles](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/structures-constructing-a-castle/)  [Cushions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/textiles-cross-stitch/)  [Static Electricity](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/electrical-systems/) | [Slingshot Cars](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/)  Torches  [Pavilions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/structure/)  [Fastenings](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/textiles/) | Bridges  [Pop-Up Books](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/mechanical-systems-making-a-pop-up-book/)  Greetings Cards  [What Could Be Healthier?](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/food-what-could-be-healthier/)  [Stuffed Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/textiles/) | Playgrounds  [Automata Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/mechanical-systems-automata-toys/)  [Waistcoats](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/textiles/)  Steady Hand Game |
| Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png** | Pneumatic Toys  [Castles](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/structures-constructing-a-castle/)  [Cushions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/textiles-cross-stitch/)  [Static Electricity](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/electrical-systems/) | [Slingshot Cars](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/)  Torches  [Pavilions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/structure/)  [Fastenings](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/textiles/) | Bridges  [Pop-Up Books](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/mechanical-systems-making-a-pop-up-book/)  Greetings Cards  Soft Toys | Playgrounds  [Automata Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/mechanical-systems-automata-toys/)  [Waistcoats](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/textiles/)  Steady Hand Game |
| Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png** | [Eating Seasonally](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/food-eating-seasonally/)  Pneumatic Toys  [Castles](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/structures-constructing-a-castle/)  [Cushions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/textiles-cross-stitch/)  [Static Electricity](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/electrical-systems/) | [Slingshot Cars](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/)  Torches  [Pavilions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/structure/)  [Fastenings](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/textiles/)  [Adapting a Recipe](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/food-adapting-a-recipe/) | Bridges  [Pop-Up Books](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/mechanical-systems-making-a-pop-up-book/)  Greetings Cards  [What Could Be Healthier?](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/food-what-could-be-healthier/)  [Stuffed Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/textiles/) | Playgrounds  [Come Dine With Me](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/food-come-dine-with-me/) [Waistcoats](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/textiles/)  Steady Hand Game |
| Investigate and analyse a range of existing products | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png** | Pneumatic Toys  [Castles](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/structures-constructing-a-castle/)  [Cushions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/textiles-cross-stitch/)  [Static Electricity](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/electrical-systems/) | [Slingshot Cars](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/)  Torches  [Pavilions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/structure/)  [Fastenings](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/textiles/)  [Adapting a Recipe](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/food-adapting-a-recipe/) | Bridges  [Pop-Up Books](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/mechanical-systems-making-a-pop-up-book/)  Greetings Cards  [Stuffed Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/textiles/) | Playgrounds  [Automata Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/mechanical-systems-automata-toys/) [Waistcoats](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/textiles/)  Steady Hand Game |
| Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png** | Pneumatic Toys  [Castles](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/structures-constructing-a-castle/)  [Cushions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/textiles-cross-stitch/)  [Static Electricity](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/electrical-systems/) | [Slingshot Cars](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/)  Torches  [Pavilions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/structure/)  [Fastenings](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/textiles/)  [Adapting a Recipe](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/food-adapting-a-recipe/) | Bridges  [Pop-Up Books](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/mechanical-systems-making-a-pop-up-book/)  Greetings Cards  [Stuffed Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/textiles/) | Playgrounds  [Automata Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/mechanical-systems-automata-toys/)  [Waistcoats](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/textiles/)  Steady Hand Game |
| Understand how key events and individuals in design and technology have helped shape the world | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png** | Pneumatic Systems | [Slingshot Cars](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/)  Torches | [What Could Be Healthier?](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/food-what-could-be-healthier/) | [Come Dine With Me](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/food-come-dine-with-me/) |
| Apply their understanding of how to strengthen, stiffen and reinforce more complex structures | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | [Castles](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/structures-constructing-a-castle/) | [Pavilions](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/structure/) | Bridges | Playgrounds |
| Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | Pneumatic Toys | [Slingshot Cars](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/) | [Pop-Up Books](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/mechanical-systems-making-a-pop-up-book/) | [Automata Toys](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/mechanical-systems-automata-toys/) |
| Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | [Static Electricity](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/electrical-systems/) | Torches | Greetings Cards | Steady Hand Games |
| Apply their understanding of computing to program, monitor and control their products | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | Pneumatic Toys | Torches | [Computing > Mars Rover 2](https://www.kapowprimary.com/subjects/computing/upper-key-stage-2/year-5/data-hardware-and-processing-mars-rover-2/)\*,  [Computing > Micro:bit](https://www.kapowprimary.com/subjects/computing/upper-key-stage-2/year-5/programming/)\*\* | [Computing > Bletchley Park 2](https://www.kapowprimary.com/subjects/computing/upper-key-stage-2/year-6/communications-and-networks/)\*\*\* |
| **Cooking and Nutrition:** Understand and apply the principles of a healthy and varied diet | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | [Eating Seasonally](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/food-eating-seasonally/) | [Adapting a Recipe](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/food-adapting-a-recipe/) | [What Could Be Healthier?](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/food-what-could-be-healthier/) | [Come Dine With Me](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/food-come-dine-with-me/) |
| **Cooking and Nutrition:** Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png** | [Eating Seasonally](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/food-eating-seasonally/) | [Adapting a Recipe](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/food-adapting-a-recipe/) | [What Could Be Healthier?](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/food-what-could-be-healthier/) | [Come Dine With Me](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/food-come-dine-with-me/) |
| **Cooking and Nutrition:** Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed | ../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.55.png | [Eating Seasonally](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/food-eating-seasonally/) | [Adapting a Recipe](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/food-adapting-a-recipe/) | [What Could Be Healthier?](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/food-what-could-be-healthier/) | [Come Dine With Me](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/food-come-dine-with-me/) |

\*Mars Rover 2 is used to familiarise pupils with CAD and consider how they can use their computing knowledge to control a physical system, while identifying how the product could be adapted to make it more effective

\*\*Micro:bit involves pupils using coding to program a simple device. To make stronger links with D&T, ask pupils to consider how they could house the pedometer, polling program or scoreboard to suit its target audience

\*\*\* Bletchley Park 2 covers key components of a computer including different forms of input and asks pupils to design their own. To make stronger links with D&T, encourage them to consider how their computer would interact with physical systems

**Overview of Kapow’s topics by year**

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| **Year 1** | **Food: Fruit and Vegetable Smoothie**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-1/getting-started/)  Children learn how to identify fruits and vegetables and then design and make a smoothie  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/food-fruit-and-vegetables/) | **Mechanisms:**  **Moving Story Books**  [*(*4 les*sons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-1/programming-beebot/)  Children explore levers and sliders to make a moving story book  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-1-making-a-moving-story-book/) | **Structures: Windmills**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-1/algorithms-unplugged/)  Through the theme of windmills, pupils design and create their own structure and functioning windmill  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/structures-constructing-a-windmill/) | **Textiles: Puppets**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-1/digital-imagery/)  Children learn the different ways they can join fabrics together through the creation of a puppet  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/textiles-puppets/) | **Mechanisms:**  **Wheels and Axles**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-1/intro-to-data/)  Pupils experiment with mechanisms and troubleshoot why some wheels don’t rotate, before designing and building a moving vehicle  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-1/mechanisms-wheels-and-axels/) |
| **Curriculum coverage** | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for others  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Chopping fruit and vegetables  Making a smoothie  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Evaluating and adapting designs  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Describing and grouping fruits by texture and taste  Understanding the difference between fruit and vegetables | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for others  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Assembling accurately  Creating different movements (up, down, along and around)  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Testing a finished product  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding what a mechanism is  Understanding how to create different movement | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for others  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Assembling different components to work together to create motion  Assembling accurately  Cutting neatly  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Testing a finished product  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Developing awareness of different structures for different purposes  Understanding how to turn 2D nets into 3D structures  Understanding what mechanisms are | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for others  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Selecting suitable equipment  Sequencing steps for construction  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Reflecting on their finished product  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Knowing the different ways fabric can be joined  Understanding how to prepare fabric for joining | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing mechanisms  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Adapting Mechanisms  Measuring and cutting accurately  Following a design brief  Working to scale  Identifying materials commonly used for wheels  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Researching and testing mechanisms  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding how an axle works |
| **Cross curricular links** | Science |  | Maths | English | Maths |

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| **Year 2** | **Food: A Balanced Diet**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/data-and-data-representation-hardware-and-processing/)  Pupils explore what makes a balanced diet and taste test combinations of different food groups before designing and making a wrap  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/food-a-balanced-diet/) | **Mechanisms: Moving Monsters**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/word-processing/)  Pupils analyse existing levers and linkage systems to identify components that they can use to plan, design and develop a mechanical monster  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-making-a-moving-monster/) | **Structures: Baby Bear’s Chair**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/programming-sratchjr/)  Pupils experiment with different shapes and manipulate materials to explore and evaluate a range of structural properties. They apply this knowledge to their own design, make and test task  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/structures-baby-bears-chair/) | **Textiles: Pouches**  (4 lessons)  Children design and make their own wallet or purse, learning to use running stitch to join two pieces of fabric together  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/textiles/) | **Mechanisms: Ferris Wheel**  (4 lessons)  Pupils explore existing mechanisms in order to design, test and make their own big wheel style ride  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/key-stage-1/year-2/mechanisms-fairground-wheel/) |
| **Curriculum coverage** | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing packaging for their smoothie  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Preparing food safely and hygienically  Chopping safely using the bridge grip  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Conducting product research  Evaluating a design  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding how fruit and vegetables grow  Knowing the food groups  Understanding what makes a balanced diet | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Creating and using design criteria, generating ideas Planning for design and manufacture  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Cutting and assembling accurately  Selecting appropriate equipment and materials  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Carrying out primary research and applying to design  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Learning mechanical components  Identifying input and output | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for others, using criteria and applying their knowledge of structures  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Cutting and assembling accurately  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Examples of natural & manmade structures  Testing and evaluating  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding the definition and importance of strength, stability and stiffness  Knowing that different shapes can strengthen or weaken structures and that materials can be manipulated to improve strength and stiffness | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Considering purpose in the design process  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Threading a needle  Sewing a running stitch  Preparing fabrics for sewing  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Discuss the making process and the finished product  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Identifying parts of a needle (point and eye)  Understand the alternative ways of joining fabrics and embellishments | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing mechanisms  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Measuring and cutting accurately, working to scale and following a design brief  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Testing and adapting mechanisms  Researching mechanisms  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding how an axle works  Know materials commonly used for wheels |
| **Cross curricular links** | Maths |  | Maths |  | Maths  Science |

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| **Year 3** | **Food: Eating Seasonally**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/data-and-data-representation-hardware-and-processing/)  Pupils learn about seasonality and how the climate a food is grown in can alter the way it tastes and make a crumble and tart using seasonal ingredients  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/food-eating-seasonally/) | **Mechanisms: Pneumatic Systems**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/word-processing/)  Pupils examine pneumatic systems using syringes and balloons then apply their understanding of mechanical systems to create their own pneumatic toys  **Coming Soon** | **Structures: Castles**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/programming-sratchjr/)  Pupils learn more advanced construction techniques and plan for complex arrangements of structures with continual emphasis on evaluating throughout  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/structures-constructing-a-castle/) | **Textiles: Cushions**  (4 lessons)  Pupils learn to sew cross stitch and appliqué and then apply this to the design and creation of a cushion  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/textiles-cross-stitch/) | **Electrical Systems: Static Electricity**  (4 lessons)  Pupils are introduced to static electricity and observe the effects of it on different objects before designing and making a simple game which uses static electricity  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-3/electrical-systems/) |
| **Curriculum coverage** | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing to criteria  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Safely preparing fruit and vegetables  Following a recipe  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Tasting and evaluating their dessert  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Knowing what foods are in season and when  Understanding the benefits of foods by their colour  Knowing how climate alters the sweetness of food | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Generating and communicating ideas using sketching and modelling, using the views of others to improve their designs  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Selecting appropriate materials and equipment for functional and aesthetic purposes  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Assessing how well their product works and if it matches their design  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding how pneumatic systems work | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Planning for manufacture  Establishing and using a design criteria to help focus and evaluate their work  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Using more demanding practical skills (paper engineering/paper folding techniques)  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Evaluating as they work  Evaluating their own and other’s final product  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Application of prior knowledge and increasing knowledge of nets | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for a purpose  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Sewing cross stitch and using applique  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Compare to designs  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Construction of cushions  Understanding that fabrics can be layered for effect  Knowing different stitch types | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Using design criteria to develop ideas  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Using electrostatic energy to move objects in isolation as well as part of a system  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Evaluate and adapt designs  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding what static electricity means and how to generate it Knowing what a target audience is |
| **Cross curricular links** | Geography | Science | Maths |  | Science |

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| **Year 4** | **Food: Adapting a Recipe**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/data-and-data-representation-hardware-and-processing/)  Pupils adapt a recipe by adding or altering the ingredients and then work in groups to create a final design that falls within a set budget and design brief  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/food-adapting-a-recipe/) | **Structures: Pavilions**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/programming-sratchjr/)  In an introduction to pavilion architecture, pupils experiment with frame structures before designing their own landscape and pavilion, using a wider range of materials and construction techniques  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/structure/) | **Textiles: Fastenings**  (4 lessons)  Pupils research different types of fabric fastenings before deciding which they want to use in their design for a book sleeve  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/textiles/) | **Electrical Systems: Torches**  (4 lessons)  Pupils are introduced to electricity and electrical safety before making a simple electric circuit to create a functioning torch  **Coming Soon** | **Mechanisms: Slingshot Cars**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/word-processing/)  Pupils use kinetic energy to power slingshot cars, designing and making their own and then testing their effectiveness in time trials  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/lower-key-stage-2/year-4/mechanical-systems-making-a-slingshot-car/) |
| **Curriculum coverage** | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Working within a design brief  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Following but adapting a recipe  Preparing food hygienically  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Discuss flavours identified  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding the costs behind professional food preparation  Understanding the factors that contribute to product design | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Exploring and designing within a given context/theme  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Using a range of materials and equipment to create frame structures  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Discuss existing pavilions  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Knowing what a pavilion is  Building on prior knowledge of net structures and broadening knowledge of frame structures  Knowing that architects consider light, shadow and patterns when designing | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for others and planning production  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Selecting suitable tools  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Researching existing products  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding stitches and their benefits  Knowing how to use templates | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for others  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Creating neatly presented work  Making an electrical circuit  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Evaluating to improve their work  Testing their final products  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Electricity is energy  Batteries are used to store electricity  Know terminology of: insulator, conductor, L.E.D., battery, coin cell batteries | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Developing designs using the views of others to improve them  Using nets and tabs to design and make the car body  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Measuring, marking,cutting and assembling accurately  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Testing products in time trials  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Component names (chassis, axle etc.)  Car body shape can impact speed (air resistance) |
| **Cross curricular links** |  | Maths |  | Science |  |

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| **Year 5** | **Food: What Could Be Healthier?**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/data-and-data-representation-hardware-and-processing/)  Pupils adapt a bolognese recipe by adding or altering ingredients and learn about the ethical and hygienic issues of food  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/food-what-could-be-healthier/) | **Mechanisms: Pop-Up Books**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/word-processing/)  Pupils use a range of mechanisms and construction techniques to create a pop up story book for younger children  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/mechanical-systems-making-a-pop-up-book/) | **Textiles: Stuffed Toys**  (4 lessons)  Pupils learn blanket stitch and then design and make 3D stuffed toys  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-5/textiles/) | **Electrical Systems: Electric Greetings Cards**  (4 lessons)  Pupils explore electric circuits and apply this knowledge to design and make their own electric greetings cards  **Coming Soon** | **Structures: Bridges**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/programming-sratchjr/)  Pupils explore and experiment with a range of different bridge structures, forces and components involved in bridge building, before designing and making their own to test to destruction  **Coming Soon** |
| **Curriculum coverage** | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Adapting a recipe  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Cutting and preparing vegetables hygienically Cooking meat safely  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Tasting and adapting the dish during cooking process  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Know where meat comes from and understand ethical issues around beef  Know nutritional values of packaged food | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Planning using storyboards and designs, communicating through words and illustrations  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Making functional components  Using layers and spacers to construct pages  Cutting and assembling with accuracy  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Constantly evaluating progress against design  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understand sliders, levers and linkages  Understand structures and mechanisms | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for a purpose  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Accurately cutting and joining  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Comparing 3D object to 2D design  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understand constructions methods for 3D shapes  Knowing how to create a hidden seam | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Applying knowledge to generate design ideas  Identifying target audiences  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Making circuits  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Experimenting with circuits to consolidate knowledge of function  Testing function of product  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Drawing circuit diagrams  Knowing the function of different components  Understanding the terminology: insulator, conductor, LED, battery | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Design arch and truss bridges  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Selecting materials and equipment according to functional properties  Working with increasing accuracy in practical tasks  Use triangulation for bracing  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Testing to destruction to evaluate the successful and unsuccessful properties of a design and its materials  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding the importance of compression and tension in bridge structures |
| **Cross curricular links** | Maths  Computing | English |  |  |  |

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| **Year 6** | **Food: Come Dine With Me**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/data-and-data-representation-hardware-and-processing/)  Working in groups, children research and prepare a three course meal that will be taste tested and scored as well as researching the journey of their main ingredient ,from ‘farm to fork’  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/food-come-dine-with-me/) | **Mechanisms: Automata Toys**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/word-processing/)  Pupils develop their woodworking skills and explore cams to design and make mechanical window displays  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/mechanical-systems-automata-toys/) | **Textiles: Waistcoats**  (4 lessons)  After drawing a design in accordance with their own criteria, pupils learn how to measure, cut and assemble fabric to create a waistcoat  [**Go to topic**](https://www.kapowprimary.com/subjects/design-and-technology/upper-key-stage-2/year-6/textiles/) | **Electrical Systems: Steady Hand Games**  (4 lessons)  Pupils create electromagnetic toys and more complex electronic circuits to create a steady hand game  **Coming Soon** | **Structures: Playgrounds**  [*(4 lessons)*](https://www.kapowprimary.com/subjects/computing/key-stage-1/year-2/programming-sratchjr/)  Pupils have the opportunity to be creative and experiment with a wide range of materials and equipment, applying prior knowledge of net and frame structures as well as bracing and cladding to design and make a playground  **Coming Soon** |
| **Curriculum coverage** | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Using recipe books/websites  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Working with food hygienically and safely Working to a timescale  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Tasting and evaluating their own food  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Understanding the risks of meat or fish when not cooked or stored properly  Understanding safe storage of meat/fish | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Experimenting with cams to make suitable design decisions  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Measuring, marking and cutting woodwork accurately  Selecting appropriate equipment  Assembling components accurately  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Checking accuracy of work  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Naming types of cam  Knowing how cams impacts follower movements | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Designing for a process  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Accurate cutting and joining, using running stitch  Creating something in a given style  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Evaluating work continually  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Knowing how to create hidden seams | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Generating ideas through sketching and discussion  Modelling ideas through prototypes  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Cutting and assembling with accuracy  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Adapting products to improve functionality  Testing finished product  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Creating and using electric circuits in their designs  Knowing how to make electromagnetic motors | **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.30.png**  Establishing and using a design criteria to help focus and evaluate their work  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.01.png**  Increasingly more demanding practical skills  Selecting materials for their aesthetic and functional properties  Make, strengthen and stiffen a range of structures  **../Desktop/Screen%20Shot%202018-11-28%20at%2013.24.09.png**  Exploring existing playground structures  ../Desktop/Screen%20Shot%202018-11-28%20at%2013.38.55.png  Applying knowledge of construction techniques to realise design ideas  Stabilising more complex structures using bracing |
| **Cross curricular links** | PSHE |  |  | Science |  |