|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nursery | Continuous Provision <br> Explore different materials, using all their senses to investigate them. <br> Manipulate and play with different materials. Use their imagination as they consider what they can do with different materials. <br> Make simple models which express their ideas <br> Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures | Space <br> Explore different materials, using all their senses to investigate them. <br> Manipulate and play with different materials. Use their imagination as they consider what they can do with different materials. <br> Make simple models which express their ideas | Dinosaurs <br> Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures | Continuous Provision Explore different materials, using all their senses to investigate them. <br> Manipulate and play with different materials. Use their imagination as they consider what they can do with different materials. <br> Make simple models which express their ideas <br> Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures | Continuous Provision Explore different materials, using all their senses to investigate them. <br> Manipulate and play with different materials. Use their imagination as they consider what they can do with different materials. <br> Make simple models which express their ideas <br> Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures | Continuous Provision <br> Explore different materials, using all their senses to investigate them. <br> Manipulate and play with different materials. Use their imagination as they consider what they can do with different materials. <br> Make simple models which express their ideas <br> Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures |
| Reception | Junk Modelling <br> Build models using construction equipment. | Stick Man <br> Teach children different techniques for joining materials, such as how to use | Continuous Provision <br> Build models using <br> construction <br> equipment. <br> Teach children different techniques | Continuous Provision <br> Build models using <br> construction <br> equipment. <br> Teach children different techniques | Junk modelling, houses, bridges boats and transport. <br> Provide children with a range of materials | Clay <br> Provide children with a range of materials for children to construct with. |


|  |  | adhesive tape and different sorts of glue | for joining materials, such as how to use adhesive tape and different sorts of glue Provide children with a range of materials for children to construct with. Create collaboratively: making 3d ladybird shells: papier mache: working in pairs To use various construction materials. | for joining materials, such as how to use adhesive tape and different sorts of glue Provide children with a range of materials for children to construct with. Create collaboratively: making 3d ladybird shells: papier mache: working in pairs To use various construction materials. | for children to construct with. Create collaboratively: making 3d ladybird shells: papier mache: working in pairs To use various construction materials. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 |  | Structures: <br> constructing a windmill <br> Design purposeful, functional, appealing products for themselves and other users based on design criteria. <br> Generate, develop, model and communicate their ideas through talking, drawing, templates, mock- ups and, where appropriate, information and communication technology. |  | Textiles: Puppets <br> 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. <br> Select from and use a range of tools and |  | Cooking and nutrition: Fruit and vegetables. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock- ups and, where appropriate, information and communication technology. <br> Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, |


|  |  | Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. <br> Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Explore and evaluate a range of existing products <br> Evaluate their ideas and products against design criteria <br> Build structures, exploring how they can be made stronger, stiffer and more stable. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. |  | equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. <br> Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Evaluate their ideas and products against design criteria |  | shaping, joining and finishing]. <br> Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Evaluate their ideas and products against design criteria |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 2 |  | Structures: <br> Baby Bears Chair <br> Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and |  | Mechanisms: <br> Fairground Wheel <br> Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and |  | Mechanisms: <br> Making a Moving <br> Monster <br> Design purposeful, functional, appealing products for themselves and other users based on design criteria. |


| communicate their ideas through talking, drawing, templates, mock- ups and, where appropriate, information and communication technology. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. <br> Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Evaluate their ideas and products against design criteria. <br> Build structures, exploring how they can be made stronger, stiffer and more stable. | Generate, develop, model and communicate their ideas through talking, drawing, templates, mock- ups and, where appropriate, information and communication technology. <br> Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. <br> Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Explore and evaluate a range of existing products. <br> Evaluate their ideas and products against design criteria. <br> Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. |
| :---: | :---: |


| Year 3 | Cooking and nutrition: Eating seasonally Understand and apply principles of a healthy and varied diet. <br> Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. | Digital world: Wearable technology. <br> 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. <br> Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computer- aided design. Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Understand how key events and individuals in design and technology have helped shape the world. Understand how key events and individuals in design and technology have helped shape the world. <br> Apply their understanding of computing to program, monitor and control their products. |
| :---: | :---: | :---: |



|  |  | consider the views of others to improve their work. <br> Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. |  | consider the views of others to improve their work. <br> Understand how key events and individuals in design and technology have helped shape the world. <br> Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. |  | consider the views of others to improve their work. <br> Understand how key events and individuals in design and technology have helped shape the world. <br> Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 5 | Electrical systems: <br> Doodlers <br> 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. <br> Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. <br> Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. |  | Mechanical systems: Making a pop-up book 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. <br> Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computer- aided design. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. |  | Cooking and nutrition: What could be healthier? 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. <br> Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computer- aided design. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. |  |


|  | Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. |  | 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. Investigate and analyse a range of existing products. Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. |  | Investigate and analyse a range of existing products. Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. <br> Understand how key events and individuals in design and technology have helped shape the world. <br> Apply their understanding of computing to program, monitor and control their products <br> Understand and apply principles of a healthy and varied diet. <br> Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 6 |  | Textiles: <br> Waistcoats <br> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at |  | Structures: <br> Playgrounds <br> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at |  | Digital World: <br> Navigating the world Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at |



