

# The Whinless Down Academy - DT Curriculum Overview - KS1 and KS2

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
1			Design and make a house for the three little pigs. Generate, develop, model and communicate their ideas through talking, drawing, mock-ups. Select from and use a wide range of materials and components, including construction materials. Evaluate their ideas and products against design criteria. Build structures, exploring how they can be made stronger, stiffer and more stable.		Plan, make and evaluate a simple salad. Use the basic principles of a healthy and varied diet to prepare dishes.	Design own lighthouse (TASC) Make Punch and Judy show/puppets Make Grace Darling moving picture.  Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
2	Pupils learn about the importance of growing your own food. Use the basic principles of a healthy and varied diet to prepare dishes. Beginning to understand where food comes from.				Pupils design, make and evaluate bug hotels for a range of different insects using a range of materials and tools. Generate, develop, model and communicate their ideas through talking, drawing, templates and mock-ups.	Pupils design, make and evaluate African masks. Select from and use a range of tools and equipment to perform practical tasks. Select from and use a wide range of materials and components, including construction materials.
3		Design and create an Anglo Saxon purse.  Learn the running stitch to create. Decorate with cross-stitch and make a working drawstring.	Design and make a board game that uses magnets Play and evaluate how the board game works. Evaluate their ideas and products against design criteria.		Design, make and evaluate a Stone Age house using natural materials. 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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams.	
4		TASC Investigation: Design and make a working musical instrument 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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams and prototypes.		TASC Investigation: Pupils will design and build a game based upon an electrical circuit. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products.		Cooking and Nutrition – Children follow a recipe with cheese as the prime ingredient. Children explore understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
5			Using ingredients inspired by Ancient Greece children make a traditional Greek savoury dish and evaluate. Greek Flat-bread sale to staff/children/design/market/evaluate Greek chef?	Design and make a siege tower Children use a wider range of tools and equipment to perform practical tasks, accurately. Select from a wide range of materials and components, including construction materials, according to their functional properties.		Spy Gadget Designing and building a spy gadget to help a spy in the field. Looking at spy gadgets from the past and selecting useful features from that and incorporating them into a more modern design.
6	Design brief based around Science learning, considering nutrients. Children to design, make and evaluate savoury recipe.		Design and make own Mayan weaving. Plan own weaving using traditional Mayan colours and patterns based on Art sketches. Develop weaving techniques. Evaluate the plan, process and final product.	Design an Anderson Shelter Using photos, pupils will plan and make their own model Anderson Shelters.	Design and make VE day decorations – children to make bunting and host a VE style street party. Children to develop a range of stitches to decorate and join the bunting.	



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## Key Stage 1 -

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:

#### Design -

- 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

#### Make -

- 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

#### Evaluate -

- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

## Technical knowledge -

- 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

## Key Stage 2 -

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to:

#### Design -

- 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
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

#### Make -

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- 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

### Evaluate –

- 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
- understand how key events and individuals in design and technology have helped shape the world

#### Technical knowledge -

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

## Cooking and Nutrition -

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

## Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

#### Key Stage 2

- understand and apply the principles of a healthy and varied diet
- prepare and cook a 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.