DT Sticky Knowledge Mapping

Everton Heath Primary School

Years 5&6

Designing 5
- come up with a range of ideas after collecting information from different sources
- produce a detailed, step-by-step plan
- explain how a product will appeal to a specific audience
- design a product that requires pulleys or gears

Designing 6
- use market research to inform plans and ideas.
- follow and refine original plans
- justify planning in a convincing way
- show that culture and society is considered in plans and designs

Making 5
- use a range of tools and equipment competently
- make a prototype before making a final version
- make a product that relies on pulleys or gears

Making 6
- know which tool to use for a specific practical task
- know how to use any tool correctly and safely
- know what each tool is used for
- explain why a specific tool is best for a specific action

Evaluating 5
- suggest alternative plans; outlining the positive features and draw backs
- evaluate appearance and function against original criteria

Evaluating 6
- know how to test and evaluate designed products
- explain how products should be stored and give reasons
- evaluate product against clear criteria

Technical knowledge 5
- links scientific knowledge to design by using pulleys or gears
- uses more complex IT program to help enhance the quality of the product produced

Technical knowledge 6
- use electrical systems correctly and accurately to enhance a given product
- know which IT product would further enhance a specific product
- use knowledge to improve a made product by strengthening, stiffening or reinforcing

Food technology 5
- be both hygienic and safe in the kitchen
- know how to prepare a meal by collecting the ingredients in the first place
- know which season various foods are available for harvesting

Food technology 6
- explain how food ingredients should be stored and give reasons
- work within a budget to create a meal
- understand the difference between a savoury and sweet dish

Food technology 4
- know how to be both hygienic and safe when using food
- bring a creative element to the food product being designed

Food technology 3
- describe how food ingredients come together
- weigh out ingredients and follow a given recipe to create a dish
- talk about which food is healthy and which food is not
- know when food is ready for harvesting

Technical knowledge 4
- links scientific knowledge by using lights, switches or buzzers
- use electrical systems to enhance the quality of the product
- use IT, where appropriate, to add to the quality of the product

Technical knowledge 3
- know how to strengthen a product by stiffening a given part or reinforce a part of the structure
- use a simple IT program within the design

Evaluating 4
- evaluate and suggest improvements for design
- evaluate products for both their purpose and appearance
- explain how the original design has been improved
- present a product in an interesting way

Evaluating 3
- explain how to improve a finished model
- know why a model has, or has not, been successful

Making 4
- know which tools to use for a particular task and show knowledge of handling the tool
- know which material is likely to give the best outcome
- measure accurately

Making 3
- follow a step-by-step plan, choosing the right equipment and materials
- select the most appropriate tools and techniques for a given task
- make a product which uses both electrical and mechanical components
- work accurately to measure, make cuts and make holes

Designing 4
- use ideas from other people when designing
- produce a plan and explain it
- persevere and adapt work when original ideas do not work
- communicate ideas in a range of ways, including by sketches and drawings which are annotated

Designing 3
- prove that a design meets a set criteria.
- design a product and make sure that it looks attractive
- choose a material for both its suitability and its appearance

Years 3&4

Food technology 1
- Cut food safely
- Know that all food comes from either plants or animals.
- Use basic food handling, hygiene practices and personal hygiene
- Know how to prepare simple dishes safely and hygienically without using a heat source.
- Know how to use techniques such as cutting, peeling and grating.

Food technology 2
- Know that everyone should eat at least five portions of fruit and vegetables each day.
- Demonstrate how to prepare simple dishes safely and hygienically without using a heat source.
- Demonstrate how to use techniques such as cutting, peeling and grating.
- Weigh ingredients to use in a recipe • Describe the ingredients used when making a dish or cake
- Can talk about which food is healthy and which is not
- Follow safe procedures for food safety and hygiene.

Technical knowledge 1
- Make their own model stronger • Make a product that has at least one moving part e.g. wind/ simple motor powered boat

Technical knowledge 2
- Make a model stronger and more stable
- Use wheels and axles, when appropriate to do so
- Know how simple mechanisms work e.g. sliders and linkages
- Make a product that has at least two moving parts.

Evaluating 1
- Describe how something works
- Explain what works well and not so well in the model they have made
- Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.

Evaluating 2
- Evaluate their work against their design criteria.
- Look at a range of existing products and what they like and dislike about products and why.
- Start to evaluate their products as they are developed, identifying strengths and possible changes they might make.
- With confidence talk about their ideas, saying what they like and dislike about their product.

Making 2
- Choose tools and materials and explain why they have chosen them
- Join materials and components in different ways, including glue, sellotape and masking tape.
- Can identify and name a simple selection of hand tools (e.g. scissors).
- Carry out finishing techniques that have been modelled by the teacher
- Use simple sewing techniques including cutting, shaping and joining fabric to make a simple product.
- build structures, exploring how they can be made stronger, stiffer and more stable.
- With help, measure, cut and score with some accuracy.
- Start to assemble, join and combine materials in order to make a product.
- Start to choose and use appropriate finishing techniques based on their own ideas.

Making 1
- Use own ideas to make something
- Assemble and join materials using a variety of methods
- Begin to build structures, exploring how they can be made stronger, stiffer and more stable.
- Explore the use of different mechanisms (for example sliders, wheels and axles) in their products.
- With help, measure, mark out and cut a range of materials.
- Use tools safely (e.g. scissors and a hole punch). • Begin to assemble, join and combine materials and components together using a variety of temporary methods (e.g. glue or sellotape).
- Begin to use simple finishing techniques to improve the appearance of their products.

Designing 2
- Begin to develop their design ideas using research and discussion with peers and adults.
- Understand the purpose of their product
- Have an identified target group in mind when designing and making a simple product.
- Think of an idea and plan what to do next
- Explain why they have chosen specific textiles or materials
- Draw a simple design and label the parts of their product
- develop their own ideas through drawings, and where appropriate, make templates or mock ups of their initial ideas using ICT (if needed).

Designing 1
- Begin to research existing products before designing their own
- When researching, find out how products work and which materials have been used.
- Use own ideas to design something
- Describe how their own idea works
- Design a product which moves
- Explain to someone else how they want to make their product
- Make a simple plan before making
- Begin to develop their own ideas through drawings, and where appropriate, make templates or mock ups of their initial ideas using ICT (if needed).

Years 1&2

EYFS

ELG Fine Motor Skills
- Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases
- Use a range of small tools, including scissors, paint brushes and cutlery
- Begin to show accuracy and care when drawing.

Adapted from Assessing a Knowledge Rich Curriculum – Focus Education

DT Curriculum Mapping

Everton Heath Primary School

EYFS

Create collaboratively, sharing ideas, resources and skills. Know how to use tape dispenser, masking tape and split pins. Know how to select junk modeling materials for own projects. Return to and build on their previous learning, refining ideas and developing their ability to represent them.

Cooking & Nutrition
Preparing snack, washing hands, cleaning tables, making balance cakes independently

Years 1&2

CONSTRUCTION

PROJECT: Playground Equipment

TEXTILES

PROJECT: Finger Puppets linked to a traditional tale

FOOD TECHNOLOGY

PROJECT: Making a salad

CONSTRUCTION

PROJECT: Making a plant pot

MECHANISMS

PROJECT: Moving pictures

FOOD TECHNOLOGY

PROJECT: Making a smoothie

Years 3&4

TEXTILES

PROJECT: Containers e.g. pencil cases

CONSTRUCTION

PROJECT: light boxes

FOOD TECHNOLOGY

PROJECT: Making vegetable soup

CONSTRUCTION

PROJECT: Greenhouses

MECHANISMS

PROJECT: Pop-up story books

FOOD TECHNOLOGY

PROJECT: Making a sandwich

Years 5&6

CONSTRUCTION

PROJECT: Making a bird box

TEXTILES

PROJECT: Making cushion covers

FOOD TECHNOLOGY

PROJECT: Making bread

CONSTRUCTION

PROJECT: Making a shelter

MECHANISMS

PROJECT: Moving toys

FOOD TECHNOLOGY

PROJECT: Great British banquets