

What do you know? Design & Technology

Year 1

design a product which moves

use their own ideas to design something & describe how their own idea works

explain to someone else how they want to make their product and make a simple plan before making

make product which moves

choose appropriate tools and resources

use own ideas to make something

describe how something works

explain what works well & not so well in the model that they have made

make their own model stronger

cut food safely

Year 2

explain why they have chosen specific textiles

think of an idea and plan what to do next

choose tools and materials and explain why they have

chosen them join materials and components in different ways

join materials and components in different ways

measure materials to use in a model or structure (shelter)

explain what went well with their work

make a model stronger and more stable

use wheels and axles when appropriate to do so

weigh ingredients to use in a recipe

describe the ingredients used when making a dish or a cake

Year 3

design a product and make sure that it looks attractive

choose a material for both its suitability and its appearance

prove that a design meets a set criteria

select the most appropriate tools & techniques

for a given task work accurately to measure, make cuts & make holes

make a product which uses mechanical components

follow a step-by-step plan, choosing the right equipment & materials

make a product which uses both electrical components

explain how to improve a finished model

know why a model has, has not been successful

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 (link with graph recording)

Year 4

produce a plan and explain it

communicate ideas in a range of ways, including sketches and drawings which are annotated

What do you know? Design & Technology

use ideas from other people when designing
persevere and adapt when original ideas do not work
know which tools are used for a specific task and show
knowledge of handling the tool
know which material is likely to give the best outcome
measure accurately
explain how the original design has been improved
evaluate and suggest improvement for design
present a product in an interesting way
evaluate products for both purpose and design
use IT where appropriate to add to the quality of the product
link scientific knowledge by using lights, switches or buzzers
use electrical systems to enhance the quality of the product
know how to be both hygienic and safe when using food
bring a creative element to the food product being designed
Year 5
come up with a range of ideas after collecting information
produce a step-by-step plan
design a product that requires pulleys or gears
explain how a product will appeal to a specific audience
use a range of tools and equipment competently
make a product that relies on pulleys and gears
make a prototype before making a final version
evaluate appearance and function against original criteria
suggest alternative plans; outlining the positive features and drawbacks
link specific knowledge of design by using pulleys or gears
use more complex IT program to help enhance the quality of the product produced
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
Year 6
show that culture and society is considering in plans and designs
follow and refine original plans
use market research to inform plans and ideas
justify planning in a convincing way
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
know how to test and evaluate designed products
evaluate product against clear criteria
explain how products should be stored and give reasons

What do you know? Design & Technology

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

explain how food ingredients should be stored and give reasons
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work with a budget to create a meal

understand the difference between a savoury and a sweet dish
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