

DESIGN AND TECHNOLOGY CORE KNOWLEDGE

Year 3

Design, planning & evaluating

1) Before designing a product what is the most important thing to consider?

How long it will take

The purpose of the product

Who will help us make it

Which materials to make it with

2) Whose needs should you want to satisfy when designing a product?

Make & Technical Knowledge

3) What is the name of this tool?



4) What is the name of this tool?



5) What is the name of this tool?



6) What is the name of this tool?



7) What is the most common material used to make paper?

8) When flattening paper what happens to the mesh of fibres?

9) What is a flat shape that can be folded to make a 3D shape called?

10) What is the purpose of a structure?

11) In order to be stable a structure must what?

It must be strong

It must balance

It must have five legs

It must be made of metal

Cooking and nutrition

12) Does a healthy diet affect your height?

13) What is the most important meal of the day?

14) What does boil mean?

15) Why should you always wash your hands before handling food?

16) What is this piece of cooking



equipment?

Year 4

Design, planning & evaluating

1) What is the first type of drawing you should do when designing?

A rough sketch

A detailed drawing with labels

A map

We never draw when designing

2) What should you consider when choosing a material for your product?

3) As well as your materials and equipment, what else must you have before making your product?

Make & Technical Knowledge

4) What are coping saws used for?

5) What are tenon saws used for?

6) What is a file used for?

7) What is a steel rule used for?

Cooking and nutrition

8) Does a healthy diet affect your weight and maintaining weight?

9) Does a healthy diet help keep your skin healthy?

10) What is bacteria?

11) Why should you use separate chopping boards for raw and cooked foods?

12) Name a way in which food can be preserved.

13) What is this piece of cooking



equipment?

Year 5

Design, planning & evaluating

- 1) What is the most important thing to consider before designing a project?
- 2) What is modelling?
- 3) After completing the product, what do we call the process of thinking about how good a product is?

Make & Technical Knowledge

4) What is the name of this



tool?

5) What is the name of this



tool?

6) What is the name of this



tool?

- 7) What joins the leavers together in a linkage system?
- 8) Which everyday item makes a good pulley?
- 9) What is the part called that goes through the cam?

Cooking and nutrition

- 10) Foods rich in starch such as pasta and bread are often known by what word starting with the letter C?
- 11) What does 'use by' on a food package mean?
- 12) What types of bacteria is there?
- 13) What does protein do for the body?
- 14) What piece of cooking equipment would you use to remove lumps?

Year 6

Design, planning & evaluating

- 1) What is the first type of drawing you should do when designing?
- 2) On the final design what do we use to show more details?
- 3) Why do we make a test product?

Make & Technical Knowledge

- 4) What is a try-square used for?
- 5) What is a chisel used for?
- 6) What is a G-clamp used for?
- 7) What do all structures need?
- 8) Which frame is the strongest?

Triangle

Square

Rectangle

Hexagon

- 9) How could a square wooden frame be made sturdier?

Use cardboard triangles on the corners

Use strong nails

Paint the corners

Add a dab of glue to each corner

Cooking and nutrition

- 10) True or false? Cooking food often transforms its chemical make-up.
- 11) Why should some foods be stored in the fridge?
- 12) What kind of environment does bacteria grow most quickly?
- 13) What are the four flavours the taste buds can detect?
- 14) How does vitamin D help the body?
- 15) How does vitamin C help the body?

Answers

Year 3

- 1) The purpose of the product
- 2) The User
- 3) Coping Saw
- 4) Tenon Saw
- 5) File
- 6) Steel rule
- 7) Wood
- 8) They become stronger
- 9) Net
- 10) To support a load
- 11) It must balance
- 12) Yes
- 13) Breakfast
- 14) A temperature at which a liquid bubbles and turns to vapour
- 15) To wash away germs and stop them from spreading
- 16) Rolling pin

Year 4

- 1) A rough sketch
- 2) A material should be selected that is fit for purpose for the product
- 3) Time
- 4) Coping saws are used to cut curved shapes in wood or plastic
- 5) Tenon saws are heavier than coping saws; they are good for cutting straight lines in wood
- 6) Files are used to smooth rough or sharp edges on material
- 7) Steel rules are more accurate than plastic rulers. Steel rules measurements start at the beginning of the rule unlike plastic rulers whose measurements start around half a centimetre from the beginning.
- 8) Yes
- 9) Yes
- 10) Bacteria are tiny little organisms that are everywhere around us – we cannot see them.
- 11) To stop cross contamination of bad bacteria
- 12) Freezing, drying or pickling
- 13) Colander

Year 5

- 1) The purpose of the product
- 2) Making a model of your design
- 3) Evaluation
- 4) Try-square
- 5) Chisel
- 6) G clamp
- 7) Pivots

- 8) Rubber band
- 9) Follower
- 10) Carbohydrates
- 11) Do not use the food or drink after the date shown
- 12) Bad and good bacteria
- 13) Helps build muscle
- 14) Sieve

Year 6

- 1) A rough sketch
- 2) Labels
- 3) To make sure our design will work
- 4) The wood workers try-square is used for marking straight lines on wood.
- 5) A chisel is used to remove wood by carving it.
- 6) G-clamps are used for holding and securing work
- 7) A framework
- 8) Triangle
- 9) Use cardboard triangles on the corners
- 10) True
- 11) Some foods should be stored in the fridge to help stop bacteria from growing
- 12) Warm
- 13) Sweet, sour, salt, bitter
- 14) Helps keep your bones healthy
- 15) Helps your body to repair itself