

DT Curriculum and Knowledge Map



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 domestic and local contexts [for example, the home, health, leisure and culture], and industrial contexts [for example, engineering, manufacturing, construction, food, energy, agriculture (including horticulture) and fashion].



Knowledge

categories: Technical

Cycle B

Food Dips

Cycle A Food -

Vegetable Soup

I can list ingredients for

I can adapt my recipe to

needslectronics Paper

nhance my desig Cycle A

Structures -

frame Bridges

match the consumers

vegetable soup.

Knowledge

categories:

Knowledge/

Design Process

Technical

Knowledge

categories:

Design

Process/

Practical

Knowledge

Knowledge/ Design

Knowledge categories: Technical Knowledge/ Design Process.

Cycle B STEM Mechanisms **Pulleys and gears**

I can apply my knowledge of pulley systems to design an automotive educational toy.

I can explain clearly how to build my design andhow to mechanisms

work Knowledge

l**cantamei**fy

categories: Design Knowledge Process Cycle A

categories: Technical

Oycles B Shell extiles Money **Structures**

most suitable suitable design. work mechanisms I can suggest

how my design investigate can be altered sustainable to match a particular

materials for can make design that my design. need.

> ategories: Technical nowledge nowledge categories: T

Inowledge/ Practical Knowledge

can label the features of al a Knowledge

I can compare different fraggries: Technical structures. Process

Knowledge categories: Design Process

Cycle B Textiles Cushion

I can apply my knowledge of textiles to design a cushion with a fastening. I can investigate which materials would be most

cost effective for my design.

Knowledge categories: Technical Knowledge/ Design Process

Cycle A STEM **Mechanisms**

can apply my knowledge mechanisms to create a linke afety barrier. lcar explain bowemy barrier

Pneumatics I can apply my knowledge of

pneumatics to create a moving monster.

I can explain how my moving monster works categories:

Knowledge/ PMechanisms -Knowledge wheels and axles (STEM)

I can suggest a suitable design for a wind powered vehicle I can investigate ways to make me

vehicle move faster Knowledge

categories: Technical Knowledge/ Design Process

Knowledge categories: Technical Knowledge.

Cycle A Electronic Motors (Cont. STEM)

I can apply my knowledge of electrical circuits to create a motorised car.

I can investigate how my vehiclerch structures could be more sustainable.

Knowledge categories: Design Process

Cycle B Arch Structures New School

I can label the features of an arch structure. I can compare a range of

> Cycle A Frame structures Kites

Knowledge categories: a box kite

I can compare different kites

Knowledge categorie

Practical Knowledge

Design Process/

Knowledge

categories:

Practical

Knowledge

Design Process/

Cycle A Food Cycle B Food **Bolognese Bread Rolls**

I can describe what what ngredients are ingredients are needed to needed to prepare a prepare bread bolognese rolls.

I can modify my I can modify my design for a design to meet vegetarian. a new brief.

Knowledge categories: Technical/ Practica

Knowledge.

Food- Cous-

cous I understand where categories: Tech food comes from. nical Knowledge I can design and evaluate tasty

nutritional dishes that do not require cooking.

Textiles Puppets

I can apply my knowledge to design, construct and evaluate a

hand puppet

Is th

PD ELG: Fine Motor Skills

Use a range of small tools, including scissors, paint brushes and cutlery;

Expressive Arts and Design: Creating with Materials

Construct, stack blocks vertically, horizontlly, making enclosures and creating spaces. Joins construction pieces together to build and balance. Realise tools can be used for a purpose. Experimenting with colour, design, texture, form and function; - Share their creations, explaining the process they

Food -**Portable**

I can design and

Snacks

(STEM)

Knowledge categories: my structure stronger/stiffer/stable Design Process

Mechanical Systems -**Sliders**

I explain the steps required to

Knowledge categories Technical Knowledge/ Design Process Intro to Structures

Textiles Intro to Sewing

Knowledge categories: Practical Knowledge

What is Design and Technology?

I can talk about different designs.

Knowledge categories: Technical Knowledge

Knowledge/ Design Structures -

Frame Structures - Chair for a toy

I can apply my knowledge of frame structures to design and construct a chair that fits the brief. I can experiment how to make