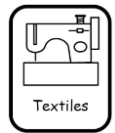




Design Technology



Knowledge organiser – Electrical System – Steady Hand Game (UKS2)

What will we be learning?

creative and practical activities – through this activity, children are equipped with the knowledge, understanding and skills to engage successfully and with increasing independence in the process of designing and making. It include a focused tasks where children are taught specific technical knowledge, designing skills and making skills, and investigative and evaluative activities where they learn from a range of existing products and about D&T in the wider world.

range of relevant contexts – children should carry out projects within the context of their science work to add meaning, relevance and create motivating opportunities for learning.

when designing and making – Children’s learning within Design, Make, Evaluate and Technical Knowledge will be developed as a connected, coherent whole when they are designing and making products.

use research – this will include the use of secondary sources and relevant websites

develop design criteria – children will develop and prioritise their own criteria and use these to evaluate the their ideas and products throughout the designing and making process.

innovative, functional, appealing – when designing and making, children will always be given scope and encouraged to be original with their thinking, create products that are required to work in some way to be successful, and think about the features of their products that will be interesting and engaging for intended users.(game)

fit for purpose – when designing and making, pupils should always think about the tasks that their products should perform.

individuals or groups – when designing and making, children should always create products with a specific client, consumer or a target group in mind. (other children)

annotated sketches – refers to children’s use of sketching techniques with related notes to develop, record and communicate their thinking.

cross-sectional and exploded diagrams – cross-sectional drawings are an effective technique when children want to show what their products will look like inside, for example the parts of the purse. Exploded diagrams enable children to communicate the components that will be used to build their products and the order of assembly.

Key knowledge

- I can create a product using a range of techniques e.g. folding, scoring, bending
- I can include an series circuit in my product using insulators and conductors
- I can bend the wires to create an interesting shape
- I can include a switch I my product to turn it on/off
- I can test my product for functionality: does the buzzer sound when the circuit is complete?



Key Vocabulary

Backboard, battery, bulb, buzzer, circuit, conductor, copper, function, insulator, LED, magnetic field, net, pliers, prototype, series circuit, side view drawing, switch, test, top view drawing.

Possible Evidence

I can say what I like and do not like about items that I have made and attempt to say why
 I can talk about my designs as they develop and identify good and bad points
 I can talk about any changes made during the making process
 I can discuss how closely my finished products meet my design criteria