Year 1 – Term 2

Do we all work in the same way?

DESIGN AND TECHNOLOGY



National Curriculum Links:
Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Explore and evaluate a range of existing products. Evaluate their ideas and products against design criteria. Explore and use mechanisms [for example, levers and sliders] in their products.

Essential Prior Learning:
Some books have moving parts, e.g. in a pop-up book. Children should be able to use scissors safely; they be able to use glue to join two or more pieces of card and recognise this as one way of joining materials.

Progression in Skill:
Most objects that help us in our lives are made up of different mechanisms; sliders are mechanisms that make things move; a bolt lock is an example of a slider using a guide. Use the story of the Gingerbread Man as inspiration for the project. Know who the slider is for, why they would use it and how it works. Use simple design criteria, e.g. the slider should move smoothly and it should make the right type of movement. Share ideas about what the slider would look like by talking and drawing. Explore slider ideas through mock-ups using paper. Select and use tools (scissors, etc.), explaining their choices, to cut, shape and join paper and card. Assemble the different parts of the slider, knowing which order to do this in. Use simple finishing techniques, printed images and/or text, paint, pens, collage to add value to the slider. Look at books with moving parts and find out how they work: • What do you think will move? • How will you make it move? • How well does it work? Say if their slider meets design criteria and how they could improve it. Know about the simple characteristics of materials and components, e.g. paper is not as stiff/rigid as card. Use the correct vocabulary when talking about simple mechanisms: sliders. A slider is a kind of mechanism that has a bar or a rod that moves forwards and backwards, or side to side, with a guide.

Long-term Memory Knowledge:
Know that products made have an intended user; talk about who this might be. Know that following a set of design criteria helps us to be successful; say whether a finished slider meets the criteria. Talk about and draw what they think a finished product could/should look like. Know that making mock-ups can helps designers understand what does and does not work. Suggest the best tools and materials for making a slider and explain the reasoning for these choices. Know which order the steps for making a slider should be carried out in. Talk about how sliders move in existing products and how well they do so. Talk about how a product could be improved.

Key Vocabulary	
materials	what things are made of
paper	a thin material that people use for writing, printing, wrapping, and many other purposes
slider	something that moves forwards and backwards in a straight line
slot	a small hole through which something thin can fit
pull	move something towards you
push	move something away from you

Progression in Resources:
paper, cardboard, scissors, spilt pins

Relevance	
Now	Create objects with moving parts and find ways to improve; they develop their understanding of materials and design to suit a given purpose.
Future	Understand how simple mechanisms are put together and can make basic repairs to products in the home.
Aspiration	Children choose careers in design, developing products; they work in restoration, repairing pre-loved products. They are able to make simple products for their own use.