Brough Primary School – Curriculum Intention Plan 2021 - 2022

Subject: Design and Technology **Year Group:** Year 3/4		**Area of learning:** Mechanisms - Using levers and linkages
Links to previous work/Remember when	● KS1 experience of working with paper and card to make simple flaps and hinges. ● Experience of cutting, shaping and joining skills using scissors, glue, paper fasteners and masking tape. ● Builds on KS1 experience of making simple sliders.	
Term	**Year 1/2**	**Key Skills to be taught**
Spring 2022 What the children should know at the end of this series of lessons		Design ● Use their research to develop some of their own design criteria. ● Draw a fully labelled diagram of their product, including some measurements. ● Choose the materials/tools they will use, based on their suitability for the task. ● Order the main stages of making. Make ● Measure and mark materials before cutting. ● Score and fold paper/card accurately. ● Join a range of materials using a variety of methods, usually choosing the method most suited to the task. ● Test their product as they work, making informed adjustments to ensure their product meets the design criteria. ● Pay attention to the finishing of their product. Evaluate ● Identify and discuss the strengths of their product. ● Identify any areas for development/ improvements that could be made. ● Discuss whether the product meets the requirements of the brief/the needs of the user – is it fit for purpose? ● Take part in peer evaluation, giving and receiving feedback from fellow pupils.

Vocabulary
❖ lever, linkage, loose pivot, fixed pivot, guide/bridge, direction, position, force, left, right, push, pull, up, down, forwards, backwards, in, out, straight, curve, slot, investigate,

design, purpose, product, function, make, measure, cut, fold, join, fix, weak, strong, tools, template, discuss, compare, evaluate, improve, change, adapt.

Sequence of learning	Objectives and suggested details provided by subject leader.
1	To investigate mechanisms in moving picture books, thinking about how well they work and the intended user of these. ● Children spend time exploring and evaluating a selection of moving picture and pop up books. Teacher to ask questions - Which part will move? How does the user make it move? How does the mechanism work?
2	To practise making simple levers and linkages and begin to understand how they can be used to make something move. ● Teacher to model and demonstrate how a simple lever is made including the correct use of tools and materials. Use a premade teaching aid for the children to replicate. The lever must involve a linkage to provide progression from KS1.
3	To design and plan my Easter card including a clear idea of which parts of my design will move and how. ● Children need to be clear how their mechanism will work and which parts they want to move. Discuss simple design criteria eg. it should work smoothly, it should make the right type of movement. Discuss the order in which the mechanism will be made.
4	To create and assemble my greetings card to include an Easter design and a mechanism. ● Children choose their own tools and materials to create their Easter card making sure they follow their plan carefully. Chn will need to work on the mechanism separately, ensuring that it works before attaching the moving picture.
5	To assess and evaluate my finished product. ● Children evaluate their final products against the design criteria saying how well the mechanism works and what they might do differently next time.

Learning Outcome/product
To design, make and evaluate an Easter card with moving parts to give to a family member this Easter.

Brough Primary School – Curriculum Intention Plan 2021 - 2022

Assessment records	List only those children who have not achieved the expected outcomes.

Assessment records	List only those children who have exceeded the expected outcomes.

End of unit assessment question