




KNOWLEDGE ORGANISER – St Gregory’s RC Primary School

Topic: Design Technology

Year Group: 3 Summer 1

Strand: Mechanical Systems - Levers and Linkages – Interactive Pollution Poster

What I should already know	Sticky knowledge	Key skills
<ul style="list-style-type: none"> • I have explored and used mechanisms such as flaps, sliders and levers. • Gained experience of basic cutting, joining and finishing techniques with paper and card. <p align="center">Design Brief</p> <p>Your challenge is to design and make an Interactive greeting card to give to your family at Easter time to celebrate Jesus’ life. The greeting card needs to include windows, doors, pop up and sliders.</p>	<ul style="list-style-type: none"> • I know some examples of products that contain leavers and linages and discuss how they are made. • I know there are different motions of levers • I know how my design has changed after making a prototype • I know how to make a moving product using leavers and linkages. • I know how to make this attractive based on the user/ purpose for this product. • I know, from my plan, which parts will move and how it will move. 	<p>Designing</p> <ul style="list-style-type: none"> • Generate realistic ideas and their own design criteria through discussion, focusing on the needs of the user • Use annotated sketches and prototypes to develop, model and communicate ideas <p>Making</p> <ul style="list-style-type: none"> • Order the main stages of making • Select from and use appropriate tools with some accuracy to cut, shape and join paper and card • Select from and use finishing techniques suitable for the product they are creating <p>Evaluating</p> <ul style="list-style-type: none"> • Investigate and analyse books and, where available, other products with lever and linkage mechanisms • Evaluate their own products and ideas against criteria an user needs, as they design and make <p>Technical knowledge:</p> <ul style="list-style-type: none"> • Understand and use lever and linkage mechanisms • Distinguish between fixed and loose pivots • Know and use technical vocabulary to the project

Vocabulary		Diagrams/Pictures
mechanism	A system of parts working together.	  
lever	A lever is a simple machine made of a rigid beam.	
linkage	A system of links.	
Function	How something works or operates in a certain way	
Slot	A slit for something to be inserted.	
Pivot	The central point on which a mechanism turns or moves.	
Process	A series of steps you must complete to make a product.	
System	A set of things that work together as parts of a mechanism.	