



Year 6 Autumn Term

Structures

What I already know?

- I have design and created my own mechanism including wheels, axels, levers, cams, gears and pulleys.
- I have designed and built structures including wooden frames and digital structures.
- I have created an electrical circuit and found ways of joining materials together

Key	Know	ledge

Design

- identify the needs, wants, preferences and values of particular individuals and groups
- develop a simple design specification to guide their thinking
- generate innovative ideas, drawing on research

Making

- formulate step-by-step plans as a guide to making accurately measure, mark out, cut and shape materials and components
- accurately assemble, join and combine materials and components accurately apply a range of finishing techniques, including those from art and design
- demonstrate resourcefulness when tackling practical problems

Evaluating

 critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make

<u>Vocabulary</u>		
Structures	a building or other object constructed	
Product de- sign	The process of imagining and creating products that solve users' problems or address specific needs	
Investigate	carry out research or study	
Evaluate	form an idea of the amount, number, or	
Effectiveness	the degree to which something is success-	
Purposeful- ness	the fact of having a useful purpose; behaviour that shows a clear aim and determination.	
Adapting	make (something) suitable for a new use	

Key Technical Knowledge

- how mechanical systems such as cams or pulleys or gears create movement
- how more complex electrical circuits and components can be used to create functional products
- how to program a computer to monitor changes in the environment and control their products
- how to reinforce and strengthen a 3D framework

