

ALMOND HILL JUNIOR SCHOOL MEDIUM TERM PLAN

Skills

TOPIC TITLE/SUBJECT: DT: Mechanisms and Enterprise Week

Vocabulary:	

mechanism function design criteria prototype template

Lever

Linkages

Construct, assemble, components generate, communicate, characteristics of materials direction, movement

fixed / loose pivot

DT (DESIGN, MAKE, EVALUATE)

- Explore mechanical systems.
- Draw a simple annotated design.

YEAR GROUP: 3

- Start to generate ideas for design criteria.
- Make a prototype and finished card which has at least one lever/ linkage mechanism (modify final outcome based on the evaluation of prototype)
- Evaluate what they did well on their product and things they could improve

What we already know

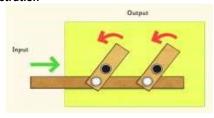
- How to design a product for a purpose
- Use a selection of tools safely and accurately (scissors, rulers, split pins)

Year 2 topics:

TERM: Autumn 2

- Use of simple levers, sliders, axle wheels
- Choose from a range of materials
- Trial and error, fixing and amending
- The simple design / evaluation process.

Illustration



Application/ Outcomes

- Design of a product (a Christmas card) for a specific purpose (Enterprise sale)
- Construction and analysis of different prototypes using different types of lever
- Construction of a 'final product' a card with a moving part / lever and linkage system
- Selling a product at an Enterprise sale

Concepts

- Product must be designed for a specific person (family member or friend)
- A lever is a mechanism to move something with little force
- Levers must be linked in some way
- A product must be designed for a specific purpose
- Products can be evaluated and improved during the design process

Other/Cross Curricular Links with English/Maths/Adaptation for SEND Maths – pricing a product

Science - forces

Art – design of a card that is aesthetically pleasing

SEND Adaptations – word-banks, image-mats, mixed ability pairings, varying outcomes, simplified design and evaluation resources.