Unit 12 Mechanical Books. **Year 4** **Term 3**

Purpose of Unit

In this unit, children will design and make a mechanised illustration for as book or story they have read. It will include linkages and levers based on a story they have read. Children will gain an understanding of linkage-type mechanisms by investigating a range of products e.g. *books, greetings cards.*

Key Skills

Literacy
Children will be encouraged to talk about their ideas and designs. They will be taught appropriate vocabulary e.g. *lever, linkage, pivot, hinge, joint, scoring.*

Numeracy
Children will measure accurately. They will develop their mathematical vocabulary by using understanding concepts such as – *rotary movement, linear movement. They will understand how levers work and how to make simple calculations to work out mechanical advantage.*

ICT
Children might use electronic books to generate ideas for their own designs. They might use a computer to produce text and graphic images to put into their books.

Pupils will

- have investigated products which use levers and linkages e.g. *greetings cards, pop-up books.*
- have made different types of lever, linkage and pop-up mechanisms.
- have designed and made an illustration with moving parts.
- have evaluated their solution and suggested improvements.

Common Requirements

P.S.E. – Consider the user of the illustration.

Health and safety

No additional specific advice given for this topic over and above the need to offer general advice on safe tool use.