Unit 7 Moving Monsters **Year 3** **Term 1**

Purpose of Unit

In this unit, children learn how simple mechanisms can be used to produce different types of movement, with a focus on pneumatics. This could be linked to stories or poems. The techniques used in this unit could be used in other contexts where something needs to be controlled by moving it backwards/forwards or up/down e.g. *tip-up truck, jack-in-the-box.*

Key Skills

Literacy
Children will be encouraged to discuss their ideas.. They will be taught strategies for talking in groups e.g. dealing with different ideas. They will be taught appropriate vocabulary e.g. *pneumatics.*

Numeracy

Children will measure accurately. They will develop their understanding of position and direction e.g. *opposite, along, through, middle, next to.*

ICT
Children might gather information to support their investigative work from CDRoms or from the Internet. Pupils might enhance their finished product using clip art. A digital camera might be used to record progress.

Pupils will

- learn how simple mechanisms can be used to produce different types of movement, focussing on pneumatics;
- have gathered information about moving toys and objects which use air to make them work e.g. *balloons, coiled party blower, bicycle pump;*
- have generated ideas and designed a monster which moves using pneumatics;
- have made a working monster accurately and finished it to a high standard;
- have evaluated their monster, highlighting the strengths and weaknesses of their finished product.

Common Requirements

No specific emphasis.

Health and safety

Make sure components are clean and if using syringes, use sterile products that have not been used for medical purposes. Explain to children the dangers of handling discarded syringes found in the environment. If using washing-up liquid bottles, make sure they are carefully washed out as the contents may cause irritation to the skin or eyes.