Unit 8 Land Yachts. **Year 3** **Term 2**

Purpose of Unit

Through designing and making a model land yacht, the children will learn more about wheels, axles and frameworks and discover how wind power can be used to move a vehicle.

Key Skills

Literacy
Children will be encouraged to talk about their ideas and designs. They will be taught appropriate vocabulary e.g. *wind power, material, friction, stability.*

Numeracy
Children will measure accurately. They will develop their mathematical vocabulary by using such words as – *light, heavy, area, speed. T*hey will learn to calculate and compare areas. They will test their land yachts by timing them over a measured distance

ICT
Children might gather information to support their investigative work from CDRoms or from the Internet.
Logos for the sail can be designed on a computer using a suitable graphics package.

Pupils will

- have discovered situations where wind is used as a source of power e.g. *windmills, wind generators, wind surfers, sailing boats.*
- have learnt what a land yacht is and how it works.
- have investigated sails to find the best size/shape.
- have designed and made a land yacht.
- have decorated their sail e.g*. using fabric pens/paints, computer generated designs.*
- have evaluated their land yacht against their design criteria.

Common Requirements

This unit is particularly strong in problem solving e.g. designing a land yacht taking into account the factors that influence its design, e.g. finding the optimum size of sail to balance speed (large sail area) with stability (small sail area).

Health and safety

When carrying out a risk assessment for this activity, teachers will need to consider the materials, tools and equipment being used.