



Design and Technology – Year 6

Spring 1 – Design, make and evaluate an alarm to protect a vehicle

In Design & Technology I have already learnt:

To use a simple circuit with a switch, a motor and a battery.
There are different types of switches available to use in a circuit.
To use axels and axel holders correctly.
To make a 3D chassis from a simple 2D net.
To use ribbing, laminating and corrugating and triangulation techniques to strengthen a product.
To use junior hand tools safely.

Design, make, evaluate, user, purpose, ideas, design criteria, product, function, vehicle, wheel, axle, axle holder, chassis, dowel, body, cab, assemble, shape, finish, free, moving, mechanism, shell structure, shape, net, 3D, three dimensional, marking out, scoring, tabs, adhesives, corrugating, ribbing, laminating, correflute, circuit, fault, connection, switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, frame structure, reinforce, stability

I can use each type of switch in a simple circuit so that I understand how the user operates them and how they work.

I know that alarm system has four parts: an input e.g. a switch, pressure or motion sensor; a process or electrical circuit; an output e.g a siren or flashing light and feedback where the siren or flashing light is telling me that something has happened.

I have strengthened my knowledge of frame and shell structures and will select the structure most appropriate to my design.

I can select from laminating, ribbing, corrugating and triangulation to strengthen my structure where necessary.

New Design & Technology words:

Slide switch, **buzzer**, false bottom, rectify, tilt switch, feedback, control, **sensor**, programme.