EDEN Academy Trust
Working together to make a difference

Design Technology Curriculum – Cycle B
Key Stage 1 – Spring Term

Theme – Mechanisms and Electrical Systems

Enquiry Question – How will your vehical move ?

National Curriculum Coverage

When designing and making, pupils should be taught to:

Design

Design purposeful, functional, appealing products for themselves and other users based on design criteria

Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]

Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

Explore and evaluate a range of existing products

Evaluate their ideas and products against design criteria

Technical knowledge

Build structures, exploring how they can be made stronger, stiffer and more stable

Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Cooking and Nutrition

Use the basic principles of a healthy and varied diet to prepare dishes

Understand where food comes from.

Generic Knowledge and Skills

Developing, planning & communicating ideas

- To think of some ideas of their own based on own experiences.
- To model ideas by exploring materials, components and construction kits and by making templates and mock-ups
- **To use pictures and words to plan.**
- **To explain what they want to do and what they are making.**
- **To describe their design by using pictures, diagrams, models and words.**
- **To select and name the best tools and materials.**

Working with tools, equipment, materials and components to make quality products

- To know the characteristics of materials they are using

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• To begin to make products using appropriate techniques. • **To explain which tools/ materials they are using and why they have chosen them** • **To measure, mark, cut and shape components with some accuracy, with help.** • To use tools and equipment safely. • Start to choose and use appropriate finishing techniques. **Evaluating processes and products** • **To describe an existing product and say what it is and how it works.** • **To explore what materials existing products are made from** • **To understand what evaluate means.** • To evaluate their design and product through discussion. • To explain what went well with their work. • **To identify a few simple changes to their product to make it better, if they were to make it again.** To begin to evaluate their product against the design criteria	
Specific Knowledge and Skills	Vocabulary
Mechanisms • To join materials together as part of a moving product. • **To use wheels and axels to make a moving model** ***(Tools:** card, recycled boxes, wooden dowel, wheels, tape, blue tac)* **Construction** • **To make a vehicle stronger, stiffer and more stable using tabs and L braces.** • **To join materials using temporary fixings (glue, split pins, blue tac and tape)** • To use joining or folding to make a product stronger. ***(Tools:** card, cardboard, tape, tubes, glue spreader, split pin, blue tac)*	