

Linked learning theme: Cracking Coasts

Summer term 2, Year 5

DT – Mechanical systems

Prior knowledge

In Year 2, children created a moving train using wheels and axels. In Year 3, children used levers to create a launching product.

Core knowledge

- Understand what gears are and how they are used.
- Understand what a pulley is and how it is used.
- Exact measurements and good planning are needed.
- Design criteria set out what is required to make their product.
- When using equipment such as saw and glue guns, it is important to follow health and safety rules set out.

Key skills

- Research products that use gears and pulleys. Identify what makes them successful.
- Ask relevant questions about how to plan and then make their product.
- Use exploded diagrams to show their planning.
- Use different techniques to create the final product.
- Work safely and confidently with equipment.
- Evaluate the finished product against the design criteria and adapt / refine their product to ensure it meets the needs of the user.

Vocabulary

	Gears
Evaluate	Pulleys
Design criteria	
Exploded diagram	

Learning Outcomes

- I can identify user and purpose.
- I can record ideas using exploded diagrams.
- I can select and use a wide range of tools and materials accurately.
- I can refine my product – review and rework.
- I can explain how the finished product could be improved related to design criteria.