

How can we use our knowledge of mechanical systems to make structures move?

During this topic, we will be:

- Visiting a local park to look at the mechanics of playground equipment.
A3 - I can generate ideas by collecting and using information.
A4 - I can communicate alternative ideas through discussion, annotated sketches, cross-sectional and pattern pieces and prototypes, showing that I am aware of constraints.
- Looking at how cogs work, particularly on playground equipment and making our own cogs.
- Designing a Ferris Wheel. Thinking about which material would be best to use, as well as considering strength and the ability to fold.
A2 - I can incorporate the views of intended users and for the intended purpose.
- Using our knowledge of rotation to create a model Ferris Wheel.
D1 - I can measure using mm to cut, score and fold with precision.
D3 - I can select appropriate joining techniques.
D4 - I can use techniques for reinforcing and strengthening structures.
- Reviewing and evaluating our Ferris Wheel, thinking about the purpose and overall effect.
A5 - I can reflect on my designs as they develop, drawing on previous experience.
- Creating mechanisms using Lego.