| Year 5 & 6 Design and Technology – Fairground rides Cycle B Aut 2 | | | | |
|---|---|---|-----------------------|--|
| Key vocabulary | | | Key Knowledge/ skills | |
| Carousel | Comes from the Italian garosello and Spanish carousella, which roughly translate to "little battle" – and this word was used by knights to describe a game played by Turkish and Arabian horsemen in the 12th Century. | To make a carousel move dowel (axle) (attor, red. (pulley) (drive belt) To make a Ferris wheel move (axle) (axle) (axle) (cottor, red. (pulley) (drive belt) (drive belt) | Design | I can come up with a range of ideas after I have collected information. I can use cross sectional planning to show my design. I can produce a detailed step by step plan. I can check that my design is the best it can be |
| Pulley | A wheel on a axle or shaft that is designed to support movement and change of direction. | | Make | I can use a range of tools and equipment expertly. I can think about the functionality of my work. I can measure accurately enough to ensure that everything is precise. I can ensure that a product is strong and fit for purpose. I can join materials in different ways, and choose the most suitable one for my project. |
| Motor | A machine that supplies motive power for a vehicle or other device. Framework An essential supporting structure of a building, vehicle or object. | | | |
| Driver | A part in a mechanism that receives power directly and transmits motion to the other parts. | | Evaluate | I can explain how my product will appeal to the audience. I can test and evaluate the final product. I can practice my evaluation skills by evaluating existing products. |
| Program | A series of coded instructions to control the operation of a computer or object. | | | |
| Traditional | Existing in or as part of a tradition; long established | | | I can say how a product meets the design brief. I can check whether anything could be improved |
| Dowel | A dowel is a cylindrical rod, usually made from wood, plastic, or metal. | | | and state why |



Key points / information

Prior learning: Think of everyday objects that use electrical motors to cause rotation.

An electrical circuit for the fireground is made up of a cell (battery), wires, motor/light and a switch.

Key points:

Rotation means the circular motion of an object around a centre point and create movement. Pulley and belt systems can be used to transfer movement to help the fairground ride move round and round and up and down.

Key people:

Thomas Bradshaw invented the mechanical steam powered carousel in 1861.

John Wardley is a modern day designer of fairground rides and is famous for designing rides for Alton Towers, Thorpe Park and Chessington World of Adventure theme parks.









