

Fairground: DT : Year 6

| | Learning Objective | Overview | Assessment Questions | Resources |
|-----------------|--|--|---|--|
| Lesson 1 | To look at a range of familiar products that use rotating parts. | Children to explore and discuss different fairground rides they have been on. They will think about how they move, what are the components that join them together and the mechanisms that make them work by labelling different pictures of fairground rides. | <ul style="list-style-type: none"> • Can children identify everyday objects that use electrical motors to cause rotation? • Can children identify how rotation is used in fairground rides? • Can children explain how electrical circuits and motors are used to make objects rotate? | <ul style="list-style-type: none"> • Slides • Picture Cards • Worksheet 1A/1B/1C • Variety of objects with rotating parts (FSD? activity only) • Large sheets of paper (FSD? activity only) |
| Lesson 2 | To investigate ways of using electrical motors to create rotating parts. | Children to explore and investigate electrical motors and how they make fairground rides rotate. They will learn about pulley and belt systems and use appropriate materials to create a circuit that would be suitable for different fairground rides. | <ul style="list-style-type: none"> • Can children describe how an electrical circuit with a motor can be used to create rotating parts? • Do children understand how pulley and belt systems can be used to transfer movement? • Can children use electrical components to investigate ways of creating replica fairground rides? | <ul style="list-style-type: none"> • Slides • Challenge Cards A/B • Wires, motors, switches, etc. for electrical circuits • Elastic bands, cotton reels, doweling, card, etc. • Worksheet 2A (FSD? activity only) • Picture Cards (FSD? activity only) |
| Lesson 3 | To investigate ways of making a framework for a fairground ride. | Children to explore and investigate creating a framework for different fairground rides in preparation for designing and making their own fairground ride. They will work through various challenges to learn different skills that will help with constructing their fairground ride. | <ul style="list-style-type: none"> • Can children describe ways of strengthening and reinforcing structures? • Can children suggest ways in which ideas for frameworks could be developed to ideas for their own fairground ride designs? • Can children use a variety of materials and components accurately? | <ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Card, doweling, string, paper, straws, etc. • Glue, scissors, rulers, etc. • Activity Cards (FSD? activity only) |
| Lesson 4 | To be able to design a fairground ride with a rotating part. | Children to use all the information they have acquired over the last few lessons to design their own fairground ride. They will need to consider what motor to use for the rotating part as well as what materials will create an effective stable framework. | <ul style="list-style-type: none"> • Can children make a decision about what kind of ride they will make? • Can children design an appropriate electrical circuit for their ride? • Can children describe the process they will need to go through to successfully complete their product? | <ul style="list-style-type: none"> • Slides • Worksheet 4A/4B • Paper (FSD? activity only) • Design Card (FSD? activity only) |
| Lesson 5 | To be able to make a fairground ride following a design. | Children to follow their designs to create their fairground ride with a rotating part. They will need to ensure they are working safely and carefully. | <ul style="list-style-type: none"> • Can children follow a design to create a fairground ride with a rotating part? • Can children work accurately and safely with a variety of tools, materials and electrical components? • Can children identify ways of improving their fairground rides to create a finished product of a high quality? | <ul style="list-style-type: none"> • Slides • Completed designs from lesson 4 • Appropriate components for electrical circuits • Card, doweling, straws, string, elastic bands, cotton reels, empty boxes, etc. • Scissors, craft knives, glue, tape, etc. |
| Lesson 6 | To be able to evaluate a finished product. | Children will demonstrate their finished moving fairground ride then evaluate both their process and their finished product, either individually or with a partner. | <ul style="list-style-type: none"> • Can children evaluate a finished product fairly? • Can children suggest ways they could improve their product if they were to make it again? • Can children recognise ways in which they have been successful? | <ul style="list-style-type: none"> • Slides • Completed fairground ride models • Worksheet 6A/6B • Worksheet 6C (FSD? activity only) |