

Castlefield School- Design and Technology

Topic: Product for the wider environment (Bird feeders)

Year: Three

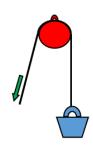
Theme: Communities and the Wider World

Technical knowledge

Bird feeders help adult birds to spend less time foraging and expending energy to feed their nestlings. If birds have a bird feeder they can come back to regularly, it helps with a lack of food particularly in the Winter.

Types of pulleys

Bird feeders can be made using a range of materials and a pulley mechanism.

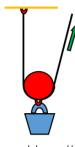


A static pulley is the most simple and has an axel that is stationary. It uses this axel

and a wheel to

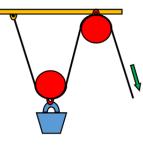
redirect the force

of a rope.



A moveable pulley has an axel that can move and is also used to redirect forces. With one

end of a rope anchored, a moveable pulley is able to attach a double amount of force to an object.



A compound pulley is a combination of a static and moveable pulley.

Keeping safe

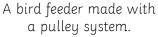
Hold sharp objects the correct way. Don't walk around the classroom when holding sharp knives/equipment.

When using the tools, hold them the correct way and remember to be responsible when using them.

Key Vocabulary To improve something. enhances bird feeder A container designed to be filled with birdseed and placed outdoors to attract wild birds. Not able to be moved. stationary force A push or pull on an object. A force can cause an object to accelerate, slow down, remain in place, or change shape. anchored To make secure or hold steady. A pin or shaft on or with which a wheel or pair of wheels axel turns. A mechanical system made by looping a rope over one or pulley more wheels. hinge Connects two pieces of material together to make a swinging motion.

Types of bird feeders







A bird feeder made with recycled materials



A bird feeder made with household materials.