

Blakeney Smugglers Class Spring Term 2022 - Robots & Machines

Science	Art & Design	Computing	D&T	Geography	History	MFL	Music	PE
<p>What's inside a robot? Electrical components & power sources (Science/DT) Circuits</p> <p>Circuit training! Investigate electrical circuits (Science/DT)</p> <p>Flick the switch! Exploring switches. Recording explanations (Science/English)</p> <p>Add sensors to circuits. Consider use in robots (Science/D&T)</p> <p>Light it up! Adding bulb eyes/sensor/switch to robots (Science/D&T)</p> <p>Pneumatic fanatics! Make own pneumatic systems; forces (D&T/Science)</p> <p>Planning pneumatic feature in junk-model robot. How force works (D&T/Science)</p> <p>Scrap-metal yard Properties of metal - metal meals! (Sci/English) Metals & magnets attract /repel Magnetic North & South (Science/Geography)</p> <p>How strong magnet? Fair Test investigations use of measures (Science/Maths)</p> <p>Magnetic robotic arms. Building working arms to lift items (Science/D&T)</p>	<p>Robot artist Eric Joyner. Appraise key paintings. (Art/ICT)</p> <p>Recreate robot painting in style of Eric Joyner (Art/ICT)</p> <p>Robot artist Egenberger talking about 1950s influences in his art (Art/History)</p> <p>Be a graphic artist! Make own computer-generated robot art (Art/ICT)</p> <p>Workshop & gallery of Clayton Bailey. Research, respond, plan (Art/ICT)</p> <p>Direct control child. Fun remote controls (English/Art)</p> <p>Collaborative class robot sculpture, in style of Bailey's work. Photo (Art/D&T)</p> <p>Fictional robots / Robots movie Cartoon storyboards (English/Art)</p> <p>The Iron Man description, similes. Sketching images (English/Art)</p> <p>Famous robots from Star Wars & Dr Who</p> <p>Make Dalek or other Robot! (English/Art)</p>	<p>What is a robot? Exploring key themes and vocabulary (English/ICT)</p> <p>Instructions - key language robot movements (Maths/ English)</p> <p>Robots to the rescue! Newspaper articles - rescue exploring robots (English/ICT)</p> <p>Our new robotic pet! Learning to direct a Roamer/ Floor Turtle/ Bee Bots (ICT/Maths)</p> <p>Roamer routes. Directing Roamer Pet (ICT/Maths)</p> <p>The language of LOGO. Directions 'from floor to screen' (ICT/Maths)</p> <p>Direct screen turtle through a maze (ICT/Maths)</p>	<p>Making life easier robots in the home. Designs for new uses (English/ D&T)</p> <p>To the future - What might robots of the future be able to do? (English/ICT)</p> <p>AIBO & RoboSapien collages. Plan for bringing eyes to life! (Art/D&T)</p> <p>How does it work? Pneumatics - explain, and investigate (D&T/ English)</p> <p>Building own junk-model robots with pneumatic mechanism (Art/D&T) Robot Wars</p> <p>Introducing our robots! Test/ demonstrate/ present models (D&T/ English)</p> <p>Storyboarding. Reflect, evaluate, record stages of project (English/D&T)</p> <p>Visit Hethel Engineering</p>	<p>Co-ordinates Compass points Latitude and Longitude</p> <p>Where are robots being developed? Technological advances and where they have happened (Geog & ICT)</p>	<p>Jobs for robots. Compare past. How had technology improved the way things are made and the way things work?</p> <p>Local visit to factory (Hist/Geog)</p> <p>Robot beginnings & space race. Create information page (History/ English)</p> <p>Robot ancestors. Famous robots. Key fact timelines (History/ICT)</p> <p>Look at the first computers and compare to today.</p> <p>Development of robotic toys. Artefact history (History/D&T)</p> <p>People's memories of having early robotic toys (History/ English)</p>	<p>Name day to day objects that have technology in them:</p> <p>Washing machine Toaster Computer Laptop Mobile phone</p> <p>Research where different brands are made and find out what language they speak there.</p> <p>e.g. Apple Bosh Braun Hotpoint Indesit LG Maystag Mitsubishi Samsung Smeg Sony Toshiba....</p>	<p>'Robots!' Music response Writing commentaries (Music/ Eng)</p> <p>Heavy metal! Iron Man 2D images using metal items. (English/Art/Music)</p> <p>Robot Hip-Hop! Music /film stimulus. Breakdancing! (Music)</p> <p>Robot City! Appraise music & respond in movement (Music)</p> <p>'Blue Man Group' Advert/flyer for tour (Music/ English)</p> <p>Percussion workshop! Sound & properties of metals (Music/ Art /Science)</p> <p>Music for metal world! Composition & perform (Music/Science)</p>	<p><i>Circuit Training</i></p> <p><i>Physical challenges and being systematic in approach to problem solving.</i></p> <p><i>E.g. the crate game</i> <i>Large scale</i> <i>Battleships</i></p>