



# All SySTEMs Go Half Day Event Scheme of Work

Activity (Teaching and Learning resources included)	Duration	Description	Key Skills Developed (Assessment)	Syllabus Areas covered (National Curriculum for Wales)	Learning outcomes, differentiation
WeDo 2.0 Rover	40 Minutes	Students work individually and in a group to build a Lego "Milo" Rover.	Students gain problem solving skills, Use of Technology and Understanding	Maths: Developing Thinking  ICT: Developing ICT  Science: Make Predictions, Review, Make Changes	Students will all learn about motors and sensors. All will Build WeDo 2.0 models. Most will follow the WeDo 2.0 Rover Activity. Some will Combine to make a rover with robotic arm.
LEGO Space Animation	40 Minutes	Students work individually to program a pre-made Lego EV3 Robot (Instruction from Ev3 Lego Set) with addition of LEGO Education Temperature sensor.	Students gain a practical understanding of computer programming using the LEGO programming environment. Mathematics Communication	ICT: Developing ICT  Science: Make Predictions, Review, Make Changes	Students will all learn how to program the rover to move, thinking about how the size of the wheels effects distance travelled. Most students will learn about using sensors to control the Rover. Some students will move on to adapt the rover to make decision based on inputs to various sensors.
EV3 Mars Mission	40 Minutes	Students work independently or in small groups to design and make a Lego Animated film with green	Communicating their ideas through the use of animated video.	Design and Technology: Demonstrating their creative thinking, communicating	All students will design and build a model and story. Most will do an animation. Some will add a



# All SySTEMs Go Half Day Event Scheme of Work

		screen technology.		ideas	background to their animation while all others will have chosen a background to be added.
--	--	--------------------	--	-------	---