Spirit of Innovation STEAM Engagement Year Two Activity Overview	S	т	E	Α	Μ
	Science	Technology	Engineering DT	Art	Maths
Curriculum Topic	Investigating Everyday Materials	Algorithms and Presentations	Levers, Wheels and Axles	Nose Cone and Fuselage Designs	Measurement, Position and Data Handling
Spirit of Innovation Programme Activities including Teaching Resources	Explore (recycled) materials to see if they bend, twist, squash or stretch. Record their findings. Choose materials for a specific purpose and give reasons why.	Coder and Robot Game Simple algorithms Design a Bee-Bot Test Flight Map Produce a 'Whole Class' presentation based on Flight.	Understanding levers and their outputs – Moving Pictures	Using the PowerPoint presentation representing nose cone and fuselage, ask pupils to design their own planes	Design and make a loop plane (paper straws if possible) Class Test Flight 1 Use this data to design a second plane
	Using knowledge of materials, design and build own plane, using recycled materials. *Links with Engineering.	Teacher to combine each page ready for a " <b>WOW</b> Show."	Using knowledge and findings from the Science activities; design an aircraft. Label what materials are required and what parts are going to move	Repeat Activity 1 using a suitable art package to create a vibrate computerised piece of art	Measure and observe the top 4 planes Re-design and make third plane Class Test Flight based on overall observations and measurements. Discuss findings





	The importance of	Internet Safety	Use classroom	
	recycling		construction kits to build	
		Design, make and write	planes with moving	
		parent/carer invitations	wheels and propeller;	
		to WOW show	k'nex, Lego <sup>®</sup> , Gears	
Other Activity Suggestions		STEAM Popcorn activities		
		linked to whole class		
		'WOW Show.'		
		Computer aided		
		aeroplane nose cone and		
		fuselage artwork		
		* Links with Art		



