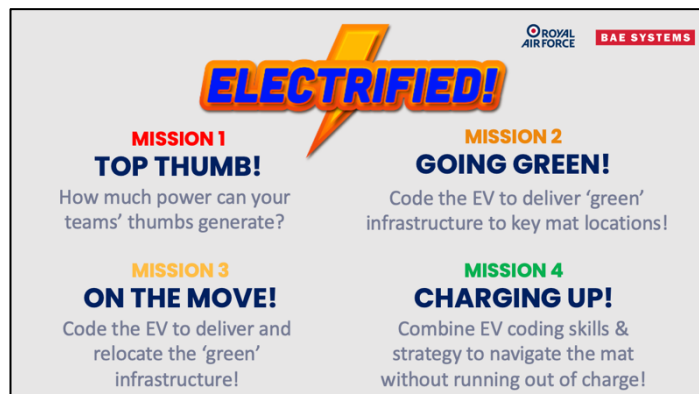


CHOOSE YOUR ROUTE THROUGH CODING SUCCESS 3: ELECTRIFIED!



In Coding Success 3, you are invited to complete 4 missions with your pupils. Teaching resources and a 'Flexible Learning Plan' are available for each mission and there are suggestions for supporting and challenging pupils within each adaptable plan. The suggested timings on the plan are just a guide; a mission might be completed in around 1 hour, or pupils might want to spend longer tackling a mission. The choice is yours!




Coding Success 3 has been designed so that teachers can choose a route that meets the needs of their pupils and there are three routes to choose from: Beginner, Intermediate and Advanced. The mission activities can be adapted to an individual teacher's preferred teaching style and/or level of confidence with coding.

Teachers should choose ONE of the following three routes through the 4 missions, depending on pupils' needs:

The Beginner Route	The Intermediate Route	The Advanced Route
The Beginner (B) route is designed for pupils who are new to coding.	The Intermediate (I) route is great for pupils who have some coding experience using Word Blocks and are looking to apply their skills and take them to the next level.	The Advanced (A) route is aimed at pupils who have some experience of Python coding and are ready to develop their Python skills further!

Through our experiences of teaching young people, we know that there are times when pupils are ready to surge ahead or go deeper in their learning, but also times when those same learners will need extra consolidation. Curriculum expectations for coding have been referenced within each mission but we know that it is so important to set the right level of challenge and support for pupils.

AN OVERVIEW OF THE CODING SUCCESS 3 MISSIONS

	Beginner Route 	Intermediate Route 	Advanced Route 
MISSION 1: Top Thumb!	An introduction to SPIKE Prime hardware and coding using Word Blocks. Work in teams to play a 'power' generation game on the 'Top Thumb!' machine!		An introduction to SPIKE Prime hardware and coding using Python. Work in teams to play a 'power' generation game on the 'Top Thumb!' machine!
MISSION 2: Going Green!	Program a SPIKE Prime Electric Vehicle (EV) using Word Blocks to make the EV move forwards, backwards, turn and deliver a key piece of 'green' infrastructure to a location on the Mission Mat.	Program a SPIKE Prime Electric Vehicle (EV) using Word Blocks to make the EV move forwards, backwards, turn and deliver a key piece of 'green' infrastructure to locations on the Mission Mat - coding the Gyro Sensor to turn!	Python code a SPIKE Prime Electric Vehicle (EV) to make the EV move forwards, backwards, turn and deliver a key piece of 'green' infrastructure to locations on the Mission Mat - using the Gyro Sensor to turn!
MISSION 3: On The Move!	Program a SPIKE Prime EV using Word Blocks to deliver and relocate 'green' infrastructure to locations on the Mission Mat – take control using the Colour Sensor! Developing emphasis on precision and accuracy.	Program the SPIKE Prime Colour Sensor and EV to grab, lift and carry 'green' infrastructure to different locations on the Mission Mat – and at different heights! Developing emphasis on precision and accuracy.	Python code the SPIKE Prime Colour Sensor and EV to grab, lift and carry 'green' infrastructure to different locations on the Mission Mat! Developing emphasis on precision and accuracy.
MISSION 4: Charging Up!	Combine Word Block code and a 'range strategy' to prevent your EV from running out of charge whilst undertaking new mat challenges!	Combine Word Block code and a 'range strategy' to prevent your EV from running out of charge whilst undertaking new mat challenges! Put your EV up against the clock!	Combine Python code and a range strategy to prevent your EV from running out of charge whilst undertaking new mat challenges!