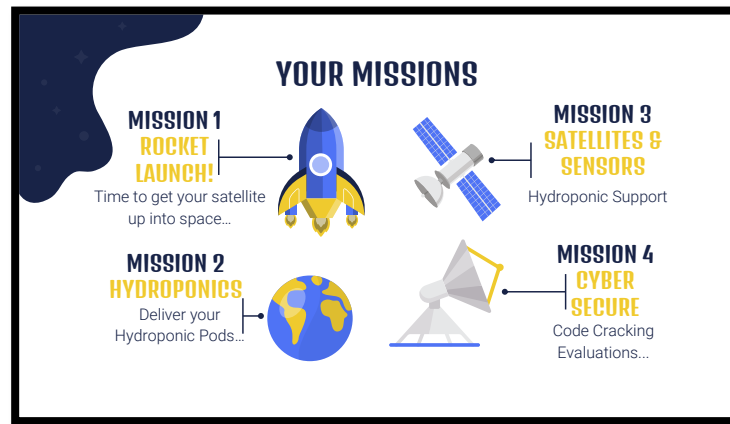## CHOOSE YOUR ROUTE THROUGH
CODING SUCCESS 2...

In Coding Success 2, 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 learning plan. The suggested timings on each plan are simply a guide; a mission might be completed in a 1-hour session or pupils might want to spend longer tackling a mission!

Coding Success 2 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 to follow 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' plan (B) is designed for pupils who are new to coding or who are building their confidence	The 'Intermediate' plan (I) is designed for pupils who have some experience of coding and are ready for more challenge	The 'Advanced' plan (A) ' is a more challenging route, designed for pupils who are looking for an experience of coding using Python

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 children 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.

Developed in partnership with

An Overview of the Coding Success 2 Missions

	Beginner	Intermediate	Advanced
Mission 1: **Rocket Launch**	Introduction to SPIKE Prime hardware and coding using Word Blocks. Making and launching a paper 'rocket' from the SPIKE Prime Rocket Launcher.		Introduction to SPIKE Prime hardware and coding using Python. Making and launching a paper 'rocket' from the Rocket Launcher.
Mission 2: **Hydroponics**	Program a SPIKE Prime Support Vehicle (SV) using Word Blocks – making the SV move forwards, backwards, turn and deliver hydroponic pods (DUPLO bricks) to areas in need on the Mission Mat.	Program a Support Vehicle (SV) using Word Blocks using the Gyro Sensor and Colour Sensor to make the SV move forwards, backwards, turn and deliver hydroponic pods (DUPLO bricks) to areas in need on the Mission Mat.	Program a Support Vehicle (SV) using Python to code the Gyro and Colour sensor to make the SV move forwards, backwards, turn and deliver hydroponic pods (DUPLO bricks) to areas in need on the Mission Mat.
Mission 3: **Satellites and Sensors**	Program a Support Vehicle (SV) using Word Blocks – to allow the SV to detect hydroponic pods using the Distance Sensor and relocate them on the Mission Mat.	Program a Support Vehicle (SV) using Word Blocks – to allow the SV to detect hydroponic pods using the Distance Sensor and relocate them where necessary, using the Colour Sensor, Boolean Logic and Variables.	Program a Support Vehicle (SV) using Python to detect hydroponic pods using the Distance Sensor and Colour Sensor, then relocate them where necessary.
Mission 4: **Cyber Secure**	Decrypt 4 messages using a Caesar Cipher Wheel to discover a secret combination that unlocks the SPIKE Prime Safe and gives pupils access to an online evaluation to complete at Beginner Level.	Decrypt 4 messages using 4 ciphers to discover a secret combination that unlocks the SPIKE Prime Safe and gives pupils access to an online evaluation to complete at Intermediate Level.	Decrypt 4 messages using 4 ciphers and explore symmetric and asymmetric encryption. Discover a secret combination that unlocks the SPIKE Prime Safe and gives pupils access to an online evaluation to complete at Advanced Level.