





1, 2, 3, code ! - Cycle 3 activities - Sequence I: Prepare the mission

	Lesson	Title	Summary
	Lesson 1	How to remotely operate a vehicle	Students must provide the instructions to remotely operate a vehicle. To do this, they define a programming language and explore the difference between it and a natural language. They are also introduced to the notion of a software bug.
	Lesson 2	How to encode a message with numbers	Students must encode a textual message using only numbers. To do this, they make suggestions and then create a correspondence table for the letters and numbers for use by the entire class. They use this table to encode a message that they send as well as to decode a message they receive.
	Lesson 3	How to code information in binary	Students must now use only two symbols (0 and 1) to transmit messages. They explore the ways of encoding different information (the four cardinal directions – North/South/East/West, the seven days of the week, etc.) by combining 0s and 1s as an introduction to binary coding.
	Lesson 4	How to encode and decode a binary message	Continuing on from the previous lesson, students apply what they have learned to encode a short worded message in binary code, then decode a message in binary code they receive.

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