Key Stage 1 - Session 2
Starting off on-screen with the app

Objectives

- Build a simple sequence of instructions for a simple route
- Use the term algorithm
- Understand that a computer follows instructions called code
- Begin to debug a simple program

Resources

- Levels 1 to 5 in Rapid Router
- Laptops with app or portal address bookmarked
- Projector or Interactive Whiteboard (IWB)
- Code wall display space in your classroom
- Printed sheets for level 5 maps (1 per pair)
- Blockly cards from KS1-Assets

Vocabulary

- Forward, right corner, left corner
- Route, journey
- Code, algorithm, sequence

Let's get started

Introduce the app at level 1 *[fig S2.1]*.

Ask the children to tell you what they can see on the screen.

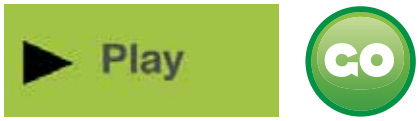
Talk about the 'blocks of code section' where you have the instructions for driving, the code workspace where you build up your **algorithm**, and the journey section where you can see the van and its destination.

What directions can the van move in?

Ask them what instruction we should give to make the van drive to the house.

fig S2.1

Ask a volunteer to drag the **move forwards** block to the code work space. **Is that enough?** If so, click 'Play' or 'Go'.



Explain how to go on to level 2 *[fig S2.2]*. Ask them to suggest what blocks of code are needed.

Explain that the blocks of code are the instructions you are giving the computer to make the van move.

Paired or individual activity

Give the class a chance to access the app and try levels 1 and 2 themselves.

You will need to have shown the children how to log into the app, using the account details you have created by setting up your class *[fig S2.3]*.

Some children will find the Left and Right van cards useful here to help then select the correct code block for their turns.

Mini review

Demonstrate level 3 *[fig S2.4]* on the IWB. **What new command would we need here?**

fig S2.2

fig S2.3

fig S2.4

Ask the children to talk to their partner and write on their whiteboards what instructions they need to drive the van to the house.

Ask a volunteer to test their solution on the IWB. **Can you read out your code?**

Key question: **If we changed the order of the instructions, would it matter?** (Test and see).

Make the point that the order of instructions in a sequence is important.

Add the word **sequence** to your code word wall.

Demonstrate level 4 *[fig S2.5]* on the IWB. **What new command would we need here?**

fig S2.5

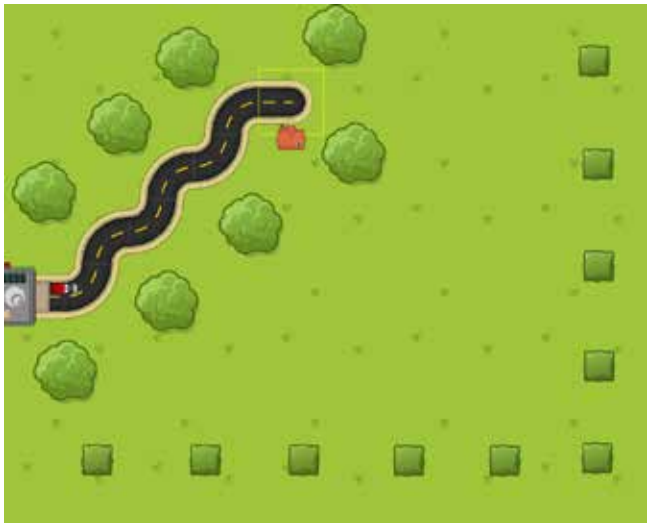


fig S2.6

Paired activity

Ask the children to continue working up to level 4.

Share and review

Look at level 5 *[fig S2.6]* together on the IWB and give the children the printed sheets to match. Assess children's learning by asking them to predict the code needed for this more interesting road on their whiteboards, or by sequencing the KS1 Blockly cards.

Can you predict the sequence of code for this route?

Explain that next time you are going to look at longer roads with lots of turns.

Recap on what the word **algorithm** means and add this display card to your code wall.

(See Glossary).