

Rainforest Coding

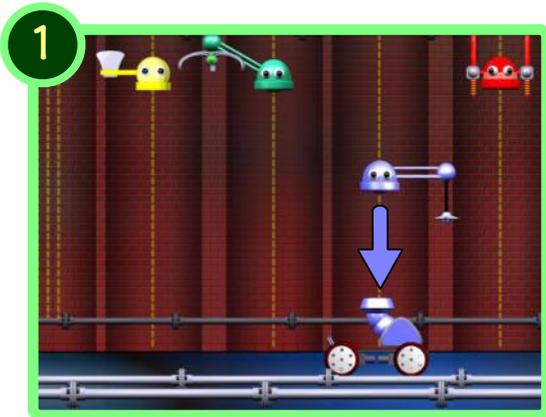
Activity Help Sheets

module 5

activity 17

The Robot Factory (part 1)

1) The robot factory is about to start building forest destroying robots. This part of the factory joins the heads to the robot bodies.

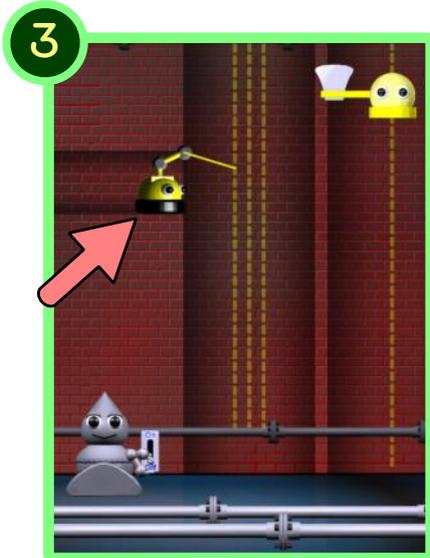


2) Doctor Han has a plan! If the robot bodies were fitted with the wrong robot heads - they wouldn't be good forest destroying robots!

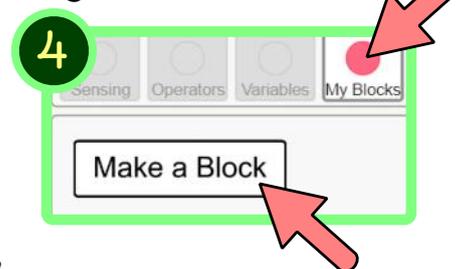
3) The Plan
If the pen bot touched the robot bodies and sent the colour to the grey robot. The grey robot could move the robot bodies to the WRONG head position.

The Grey Robot's Program

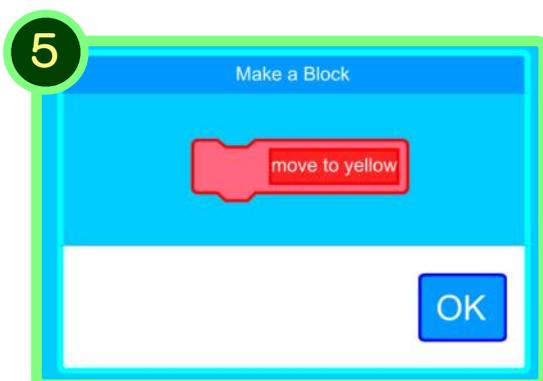
The grey robot needs four mini program. It can do this by making a block.



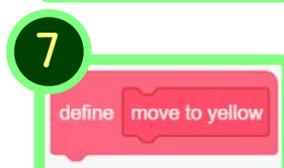
4) Click on the My Blocks button. Then click on Make a Block.



5) First make a block called 'move to yellow'. This will move a robot body to the yellow head position.



6) This is the new grey robot's 'move to yellow' block.



7) This is the block to define what the 'move to yellow' block does.

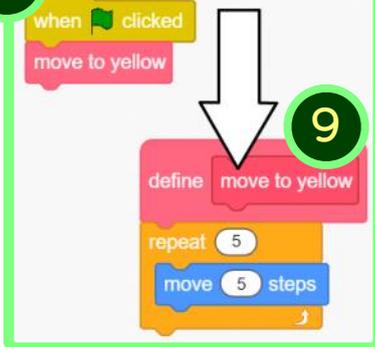
Rainforest Coding Activity Help Sheets

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The Robot Factory (part 2)

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8) When the green flag is clicked the 'move to yellow' block will call the code under the define block 'move to yellow'.

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9) The code under the 'define move to yellow' block needs to move to the yellow head position.

10) With the help of Doctor Han, four define blocks are needed to move to the four coloured head positions, yellow, green, purple and red.

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Pen Bot's Program

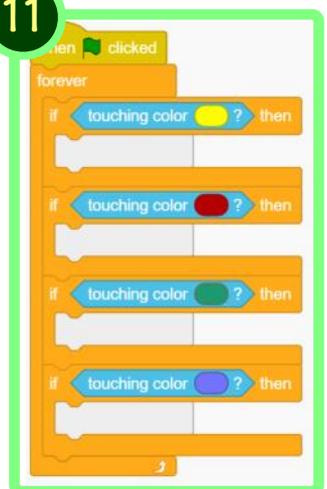
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11) Create four 'if touching color' blocks. Change the colours on these blocks to match the four robot colours.

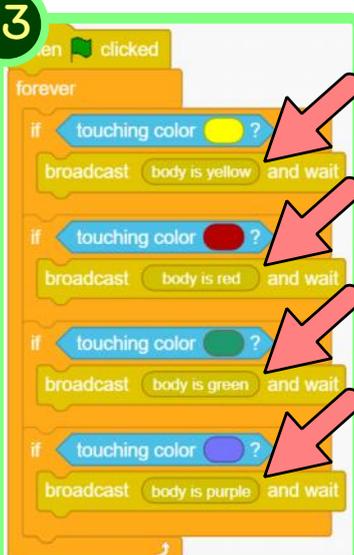
12) Click on the control blocks button and make four new broadcast and wait messages.

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13) Drag four broadcast and wait blocks inside the four 'if touching color' blocks. Change the messages to match the 'if touching color'.

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Grey Robot's Final Program

14) Finally use four 'when I receive' blocks to receive the messages from the pen bot.

Under these 'when I receive' blocks add your newly created 'My blocks' and send the robot bodies to the wrong head position.

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