

Instructions for Today's lesson

Use a browser (internet explorer or google chrome) to navigate to google search engine



Research or find out what the term 'algorithm' mean (You may need to visit a few sites)

When you have found out enough about the term 'algorithm' to explain its meaning to an adult.

WHAT IS AN **ALGORITHM**

a sequence of instructions or a set of rules that are followed to complete a task or solve a problem. This task can be anything, so long as you can give clear, short and specific instructions for it.

Example of an ALGORITHM

- 1: Come in and sit down quietly
- 2: Log on to your computer
- 3: Use a browser (internet explorer or google chrome) to navigate to google search engine
- 4: Research or find out what the term 'algorithm' mean (You may need to visit a few sites)
- 5: When you have found out enough about the term 'algorithm' to explain its meaning write it down to

What other examples can you think of?

Recipe for baking a cake



INGREDIENTS

- › 125ml coconut or rapeseed oil, plus extra for greasing
- › 2 overripe bananas (about 200g flesh)
- › 3 tbsp light coconut milk (plus 1 tbsp if using shredded coconut)
- › 100ml clear honey
- › 2 medium free-range eggs
- › 1½ tsp vanilla extract
- › 225g finely ground plain wholemeal flour
- › 2 tsp baking powder
- › ½ tsp chinese five-spice
- › ¾ tsp ground cinnamon
- › 1 tbsp shredded coconut (optional)

You will also need

- › 900g loaf tin

METHOD

01. Heat the oven to 170°C/150°C fan/ gas 3½. Grease and line a 900g loaf tin. Using a fork or electric mixer, mash the bananas well.

02. Put the coconut milk, oil, honey, eggs and vanilla extract into a large bowl, then whisk together until combined. Stir in the mashed banana.

03. In a separate bowl, mix the flour, baking powder, five-spice, cinnamon and coconut (if using) with a fork. Sift these dry ingredients onto the banana mixture, then fold in using a metal spoon until just combined. Pour into the prepared loaf tin, then bake for 50-55 minutes until well browned and a skewer pushed into the centre comes out clean.

04. Leave to cool slightly in the tin for 5 minutes, then turn onto a wire rack. Leave for at least 15 minutes more or until cool before slicing.

Recipe taken from *Asia Light* by Ghillie James (RRP £15.99, [Kyle Books](#))

What other examples can you think of?

Directions to a specific place or address (eg
from Christopher whitehead to foregate street

1:Turn right outside the Malvern road gate

2:Walk straight until you get to the traffic lights

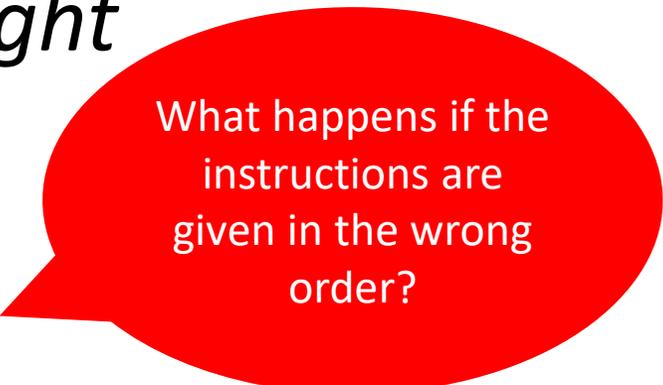
3:Turn right

4:Walk straight until you get to the traffic light

5:Turn left

6:Walk straight

*7:Follow the road round to the right (passing
McDonalds on your left.*



What happens if the
instructions are
given in the wrong
order?

- Computers are *very* good at carrying out sequence of precisely defined instructions.
- Algorithms can be used as a simple tool to help write a computer programs (which are simply instructions telling the computer what to do.)
- You may want a computer to calculate the answer to 25 divided by 5. Or tell you whether a certain number is prime or not.



Computers & Algorithms

- **Computers don't actually understand algorithms as they use a different language.**
- Algorithms will need to be translated into code which the computer will follow to complete a task.
- Code is written in a programming language and there are many different types of programming languages.
- Some that you may come across are Logo, Scratch, Blockly, Python and **Kodu**. Each of these languages are suited to different things.