

Computing - week beginning 20th April 2020



Coding is the act of writing instructions for a computer to make the computer perform a task. Coding may also be called programming. A finished set of computer instructions is called a **program**.

Algorithm— A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.

Why Teach children to Code?

Coding teaches children that finding a solution to a problem often involves a logical sequence of steps or actions. It helps to develop problem solving skills such as perseverance, trial and error and understanding of cause and effect, analytical thinking and reasoning skills, as well as math and language skills. It also challenges children to think creatively and to pursue innovative ideas and solutions.

EYFS

KS1

KS2

Everyone to watch this video which demonstrates the importance of accurate instructions: <https://www.youtube.com/watch?v=Ct-IOOUqmyY>

- <https://www.tynker.com/ide/v3?type=course&slug=activity:candy-quest&chapter=0&lesson=0>

Follow this link to play 'Tynker' Games. Select an avatar and have fun coding instructions to animate. Use the skill of coding to create algorithms.

- Design an Easter picture using a basic PAINT program.
- Can you type a short story based on Springtime into a Word Document?

- <https://www.bbc.co.uk/bitesize/topics/z3tbwmn/articles/z3whpv4>

Follow this link to find out about 'algorithms'. Watch the video. Think about some instructions you could write for your parents. Can you type up a set of instructions in a word document? Include numbers for each step. Ask your parents to carry out the instructions and see what happens. Do you get the result you wanted?

- <https://www.bbc.co.uk/bitesize/clips/ztqxhyc>

<https://www.tynker.com/ide/v3?type=course&slug=activity:candy-quest&chapter=0&lesson=0>

Now follow this link to play 'Tynker' Games. Select an avatar and have fun coding instructions to animate. Use the skill of coding to create algorithms.

- Can you use 'Publisher' software and the skill of 'copy and paste' to find appropriate images that represent Spring time from the internet and design a poster to represent Easter.

- <https://www.tynker.com/ide/v3?type=course&slug=activity:candy-quest&chapter=0&lesson=0>

Follow this link to revise algorithms and how to create them. Nice games to build animation before you move onto more advanced programs. See below.

- Think about some instructions you could write for your parents. Can you type up a set of instructions in a word document? Include numbers for each step. Ask your parents to carry out the instructions and see what happens. Do you get the result you wanted?
- Download a version of 'Scratch' on your computers. Can you create an Easter themed animation? Change your Sprite into an Easter bunny perhaps, and make it jump from A to B avoiding any hazards in the way. Save your file. <https://scratch.mit.edu/>
- <https://blockly.games/bird?lang=en&level=1> Can you solve the challenges faced in these games? Create algorithms to help you.
- <http://www.crunchzilla.com/code-monster> Follow the code monsters' instructions. See how changing the numbers in script changes the movement of the shapes.
- Design a power-point presentation that explains the importance of Easter.