

@codingweek
#NationalCodingWeek

Primary 1



HOUR OF CODE

Primary 2



HOUR OF CODE



Primary 3



HOUR OF CODE



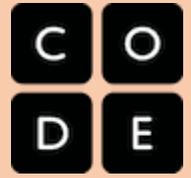
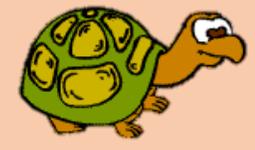
Primary 4



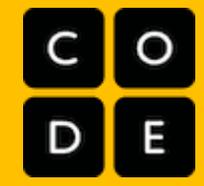
HOUR OF CODE



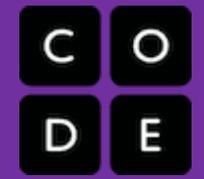
Primary 5



Primary 6



Primary 7



Learn together

Coding is a recent venture for everyone in the classroom. While a curriculum may guide you through the basics of what you need to teach, getting hands-on and experimenting with codes alongside your pupils is the most fun and effective way to get to grips with the subject.

You can get involved with other teachers who are learning to code, through social media, communities and digital forums. There are huge numbers of teachers online who are sharing their experiences and advice, so it's well worth joining these conversations.

Connect the dots

Looking at coding from a cross-curricular point of view can also be helpful in making real-life connections. For instance, you could relate the co-ordinates used in mathematics and geography to computer codes.

Much like a code, the data points work together as an instruction of where to find a specific location. Linking to instances of code being used in day-to-day situations can also help to spark your pupils' imaginations. For example, have you ever thought about how traffic lights work?

By pressing the crossing button, you're effectively sending a command to the lights to change. Some crossings will even use sensors to determine how much traffic there is and whether it's safe to cross.

Make mistakes

One of the most important things to remember when coding is that when things go wrong, it's not the end of the world – it can even be a good thing! A key component of coding is learning how to debug algorithms and commands so that they function properly, so even when things don't work the way you'd originally hoped, your pupils will be learning from trial and error. Building this resilience is critical for your pupils too.

Get creative

With the amount of technology being used in all aspects of life, the opportunities presented by a knowledge of coding are multitudinous, and open-up the possibility to make new things all the time. Why not try asking your pupils what they would design if they could create a computer program for anything? You might be surprised by the different and exciting ideas they come up with! Perhaps a code to tidy your room when it gets too messy, or a program that helps you to choose which movie to watch? Who knows, maybe one day, they'll be able to build it and turn it into a reality!

Get hands-on

Getting hands-on with computing allows pupils to see the tangible results of what they're writing on the screen. You could attach a light and sensor to the computer, so that when pupils place their hand over the sensor, the bulb illuminates, or perhaps use robotics to demonstrate a list of commands in sequence. Allowing pupils to build models that can be programmed to perform different tasks can be beneficial, as it brings together the real-life elements of computing with the benefits of cross-curricular learning.

The Computational Thinkers

concepts



Logic

Predicting & analysing



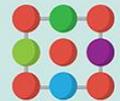
Evaluation

Making judgements



Algorithms

Making steps & rules



Patterns

Spotting & using similarities



Decomposition

Breaking down into parts



Abstraction

Removing unnecessary detail



approaches



Tinkering

Changing things to see what happens



Creating

Designing & making



Debugging

Finding & fixing errors



Persevering

Keeping going



Collaborating

Working together

We're all computational thinkers here!

When you think about it, whether we're parents, pupils or teachers - we're all natural computer scientists, capable of computational thinking.

Our brains, like computers, process, debug and make simple algorithms every day!

CAS Barefoot

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