7 top tips to help your child with secondary computing

3

4

5

6



Here are some fun and interesting things you can do together at home over the summer – and they will improve your child's understanding and appreciation of computing!

Keep it real. Young people spend a lot of time online, and keeping current on what's hot, and what should be avoided, can be a challenge. There's tons of guidance at the <u>UK Safer Internet Centre</u> to keep what they do safe. It offers the same advice that teachers receive via their own courses and resources through the <u>National Centre for Computing Education (NCCE)</u> so young people get consistent guidance at school and home.

Be inspired. Creative projects are a great way to boost confidence over the summer, building on existing knowledge while working towards making something to be proud of. Make a website, create music or animate your favourite cartoon character. <u>Code Club projects</u> are simple to follow and rewarding to do. When schools return, talk to teachers about maintaining the inspiration by starting or joining a <u>Code Club</u> or <u>STEM Club</u>.

Go exploring. Computing is all around you. Digital devices are embedded into unexpected places, hidden in plain sight. Take a look at the mysterious street boxes, controlling traffic lights or routing broadband, that you pass every day. Find embedded devices in washing machines, ovens, cars - and think about the many jobs done by people who put them there.

Get creative. Learning to program computers is a key skill - not just in computing but in many other areas of life. Learning at your own pace is a great way to develop new skills and consolidate existing knowledge - the free tools are in your hands! Whether you're learning to program with blocks or text, our <u>free programming resource collection</u> has what you need to get started.

Challenge yourself. At Isaac Computer Science, A level computer science students can <u>complete a monthly gameboard challenge</u> for a chance to win a Raspberry Pi computer - while improving core knowledge that relates directly to their exams and assessments. There's also loads of resources to help students on the <u>Isaac Computer Science</u> website.

Grow together. With life moving increasingly online, cybersecurity expertise is accelerating as a future career, helping to keep our devices and services stay safe from the threat of attack. This summer, join <u>free residential and online courses in cybersecurity from CyberFirst</u>. A partner of the NCCE, <u>CyberFirst</u> develops the next generation of cyber professionals and is led by the National Cyber Crime Centre at GCHQ.

Build it in. Develop stronger computing knowledge and skills, and close any gaps in learning, through a rich range of activities and information sources. Explore a variety of activities and challenges that can be used to support children's computing education from home in our <u>home learning pages for</u> <u>secondary computing</u>.

At <u>STEM Learning</u>, our commitment to science, technology, engineering and mathematics (STEM) education is part of everything we do. Whether that's delivering teacher CPD (continuing professional development) in STEM subjects, working with consortium partners to deliver the National Centre for Computing Education (NCCE), bringing professional role models into schools as part of the STEM Ambassador Programme or providing bespoke, long-term support for groups of schools in collaboration with companies through our ENTHUSE Partnerships, our aim is always the same – to provide a world-leading STEM education for all young people across the UK.