How we Teach Computing at Tudor Primary School

TUDOR PRIMARY SCHOOL

Autumn 2026

Authored by: Ella Mckenzie





"I like computing because it takes you out of the real world. If you feel upset, it makes you feel calmer. I love every single thing about computing, and I'm so glad there are computers in the world"

- **Alex, Year 6**

"Whether you want to uncover the secrets of the universe, or you just want to pursue a career in the 21st century, basic computer programming is an essential skill to learn"

– Stephen Hawking

I love computing because it makes learning fun"

– Emily, Year 3, Tudor Primary

"Everybody should learn to program a computer, because it teaches you how to think."

- Steve Jobs

"I love to type up my work on computers because it looks good and it's easy to write my ideas. I love taking photos on the Ipads and playing games"

- Max, Year 2, Tudor Primary

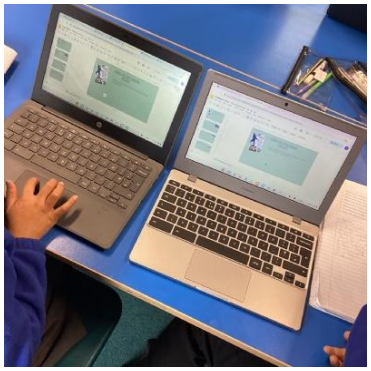
"I think it's fair to say that personal computers have become the most empowering tool we've ever created. They're tools of communication, they're tools of creativity, and they can be shaped by their user."

- Bill Gates

"I love experimenting with different computing games and how they work, and their similarities and differences"

- Daisy, Year 5, Tudor Primary





Introduction:

At Tudor Primary School, we understand the key role that computing and technology plays for our pupils. Children are constantly exposed to computers throughout their daily lives in all different forms, such as tablets, phones, laptops and many others. This makes it vital that they have a solid understanding of how they work and are able to access all of the opportunities they provide. Digital literacy is embedded across the curriculum to ensure that all pupils develop the skills, knowledge and understanding to use technology safely and responsibly.

This document will detail how we provide a broad and balanced Computing curriculum across the year groups which covers all areas of the National Computing Curriculum. As a school with a strong thematic approach to learning, technology is used throughout all aspects of the children's school lives in a wide variety of ways. This cross-curricular approach helps children to not only deepen their computing understanding, but also to practically apply their knowledge in different ways. In addition, the concrete application of technology within the context of a thematic curriculum gives the computing learning real meaning for the children, and makes it more relatable and practical for them.

Aims:

In line with the National Curriculum, we aim to ensure that all pupils:

- *can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation*
- *can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems*
- *can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems*
- *are responsible, competent, confident and creative users of information and communication technology.*

How we teach computing

Switched On Computing:

At Tudor Primary, we follow the Switched On Computing scheme to provide a consistent and in-depth approach across all of the year groups. The Switched On Computing comprises of 6 units from year 1 to year 6, all of which enable the children to progress through their learning:

- Programming
- Computational thinking
- Creativity
- Computer networks
- Communication and collaboration
- Productivity
- Online safety

As the children move up the school these units follow the same sequence, but become more challenging as the student's knowledge is deepened and broadened. The teacher starts by recapping previous knowledge, and then building upon this as a foundation for new knowledge. At Tudor, we also link these Computing Days to our Thematic Curriculum to give them context and meaning for the children. Teaching units are taught one day each half term – this is to strengthen curriculum implementation and allows pupils to engage deeply with their computing objectives. It also allows pupils to demonstrate greater engagement and a more secure understanding. Each day starts with half an hour of e-safety – this also includes a revision of previously learnt e-safety skills. Children are given the opportunity to practice these skills both throughout the day and in other areas of the curriculum. We adapt our computing units to align with the termly topic, while keeping the computing objectives at the main focuss of the learning.

Foundation Stage:



As the Switched On Computing only focusses on Year's 1 to 6, Computing is taught differently in Reception and Nursery. Although computing is no longer a named requirement in the new EYFS development matters guidelines, there are still opportunities for technology to be present in the children's learning. Below is attached a table showing the areas computing is most evidence in the new framework.

There are a number of Beebots available for the children to use in both adult led sessions, then in active play. Beebots are little electronic "bees" which children give a set of instructions to in order to make the bee move

around a mat on the floor. They help children not only begin to grasp the concept of algorithms (sets of instructions for a computer), but also provide an opportunity for directional language.

Furthermore, technology is also used by the adults in Foundation stages through the app "tapestry", and to take photographs and videos of the children's learning.

Pre-Requisite Learning Opportunities for Computing in EYFS

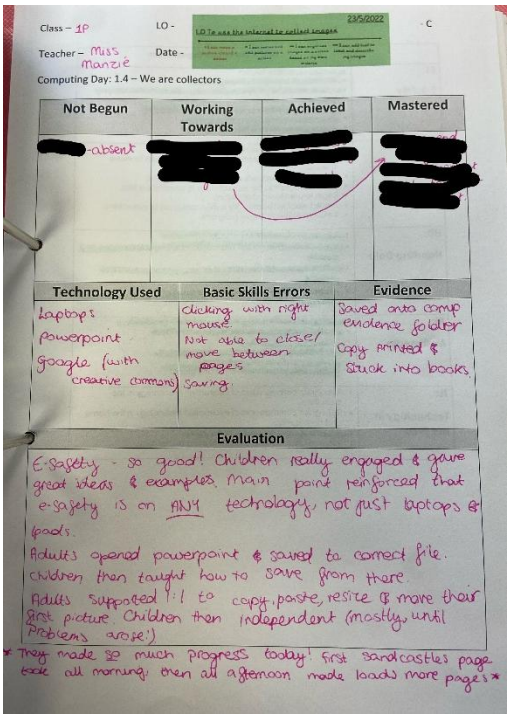
Computing			
Three and Four-Year-Olds	Personal, Social and Emotional Development		• Remember rules without needing an adult to remind them.
	Physical Development		• Match their developing physical skills to tasks and activities in the setting.
	Understanding the World		• Explore how things work.
Reception	Personal, Social and Emotional Development		• Show resilience and perseverance in the face of a challenge. • Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'.
	Physical Development		• Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
	Expressive Arts and Design		• Explore, use and refine a variety of artistic effects to express their ideas and feelings.
ELG	Personal, Social and Emotional Development	Managing Self	• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. • Explain the reasons for rules, know right from wrong and try to behave accordingly.
	Expressive Arts and Design	Creating with Materials	• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Assessment:

As a formative assessment, Class Teacher's use a specifically adapted "Feedback Sheet" to evaluate the class as a whole, identify any common misconceptions and indicate the individual children's achievement as "Not Begun, Working Towards, Achieved or Mastered". Throughout the lesson, the teacher will use this sheet to record how the pupils are getting on, noting down anyone who is struggling or might need support, and also writing down any excellent vocabulary or other verbal evidence that shows the children are understanding the computing skill. On the reverse of the feedback sheet is the year groups "Age-Related Expectations" written as a list of statements. After the lesson, the class teacher will also indicate which of these expectations has been met as a class.

Teachers use Sonar to show our summative assessment of the children's progress in computing. At the end of each term, class teachers assess each child's current attainment level in computing using the feedback sheets and Sonar statements to support them in assessing each pupil accurately.

Attached below is an example of a completed class feedback sheet for a Year 1 Computing day.



Class – 1P LO - 23/5/2022 C

Teacher – Miss Manzie Date -

Computing Day: 1.4 – We are collectors

Not Begun	Working Towards	Achieved	Mastered
absent	[redacted]	[redacted]	[redacted]

Technology Used	Basic Skills Errors	Evidence
Laptops Powerpoint Google (with creative commons)	clicking with right mouse Not able to close/ move between pages saving	Saved onto comp evidence folder Copy printed & Stuck into books

Evaluation

E-Safety - so good! Children really engaged & gave great ideas & examples. Main point reinforced that e-safety is on ANY technology, not just laptops & Ipads.

Adults opened powerpoint & saved to correct file. Children then taught how to save from there.

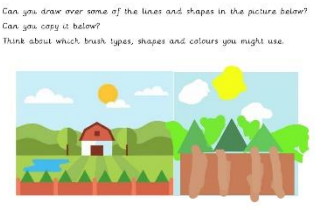
Adults supported 1:1 to copy, paste, resize & move their first picture. Children then independent (mostly, until problems arose!)

* They made so much progress today! First sandcastles page took all morning, then all afternoon made loads more pages *

Year 1 Feedback Sheet

Technology and Resources:

We are incredibly fortunate at Tudor School to have a wide variety of technology available to all year groups. This is not only useful for class computing days, but is also used to supplement children's learning across all subjects. Often, computers and Ipads are used in other lessons across the curriculum to provide children with different ways of finding information or presenting their learning.

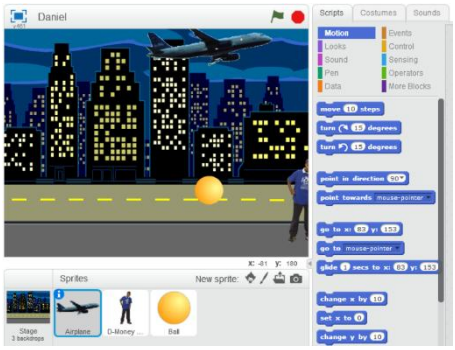


Can you draw over some of the lines and shapes in the picture below?
Can you copy it below?
Think about which brush types, shapes and colours you might use.

Year 1 'We are Artists' unit outcomes

In Key Stage 1, there is a set of Laptops which are shared between both Year 1 and 2, and are also available to the Breakfast Club for use in their morning sessions. Both year groups also have their own set of Ipads in each class for the children to use daily in their learning. We regularly use an app called Seesaw, which enables children's work to be uploaded both in school and at home. This can also be used to set homework, or to save evidence on Computing Days (as pictured above). We also have access to lots of resources, such as Beebots, which help our children with basic algorithms and programming. These can also be used in cross curricular ways to plan routes around a map.

In Key Stage 2, Chromebooks and ipads are used both in computing and across other areas of the curriculum. Ipads have apps to aid pupils in their learning, such as Seesaw, and Chromebooks are regularly used for pupils to share their work on Google classroom. On the computers and tablets we have all the applications and programmes needed for Computing days across the years. A few examples of these are scratch, Powerpoint and Moviemaker which are all pictured below.



Year 3 – programming a Scratch with three sprites to move across the screen.



Creating and testing VR spaces in year 5



Creating a website in KS2



Creating a Powerpoint on the Roman empire.

Microbits are also used in Key Stage 2 to bring computing to life and help pupils develop real world problem solving skills. Microbits are used in computing sessions but are also integrated into other STEM subjects across the curriculum to further develop skills and allow pupils to apply core computing concepts.

Computing outcomes are evidenced and saved on software such as Seesaw or Google classroom.

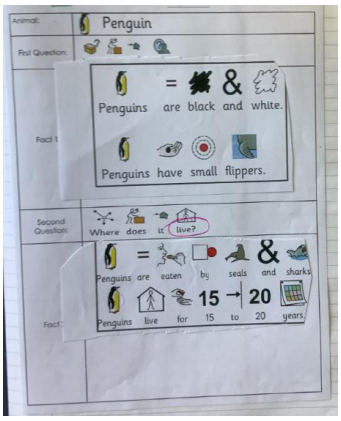
Adaptation for SEN:

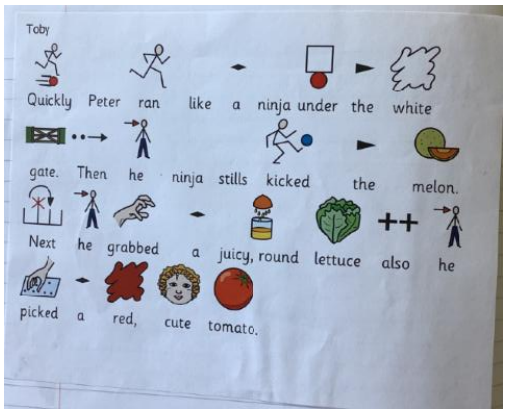
At Tudor we endeavour to ensure every child, no matter what their individual needs or barriers to learning are, has equal access to learning and the same opportunities to achieve. The curriculum is designed to be ambitious and meet the needs of all pupils. In Computing, we ensure that children with additional needs are supported, and lessons are adapted to overcome possible barriers to learning in a variety of ways, including:

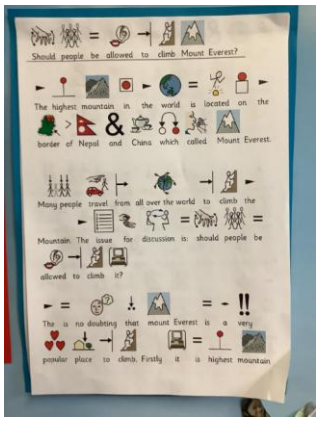
- Using multi-sensory approaches to teaching and learning, including physical activities and role play
- Pre teaching
- Over learning
- Additional adult support
- Resources to support individual physical needs
- Use of learning partners
- Having a variety of resources and materials accessible to all
- Tasks and activities being simplified/adjusted as required
- Alternative ways to record ideas e.g., voice recorders, Clicker, Seesaw
- Scaffolding of tasks e.g. sentence starters, simplified activities

Computing naturally lends itself very well to adaptation, as technology can be used to evidence learning in a variety of ways which remove barriers such as transcription and memory issues. Teachers will always consider the needs of each child in the class when planning Computing days to ensure appropriate adaptations are made so all children can access the learning and achieve their highest potential.

The use of Clicker 8 across the year groups to enable children with additional educational needs to access the curriculum with visuals:

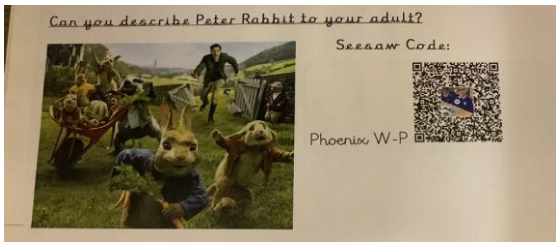






The use of Seesaw across the curriculum to remove the barrier of transcription by evidencing verbal responses and the use of physical manipulatives:





Online Safety:

The importance of internet safety in children's education cannot be overstated. E-Safety is not only a vital part of the Computing curriculum, but it is a fundamental part of Safeguarding and Child protection measures. At Tudor, we make sure that online safety is comprehensively covered as part of our Computing curriculum, as well as in other subjects including PSHE and extracurricular activities.

E-Safety in our Computing Days:

Every computing day starts with 30 minutes of online safety learning. This contains a review of past e-safety lessons, a summary of the critical elements of each year group, and any e-safety rules that must be followed during the day in order to stay safe. This should then be touched upon throughout the day wherever necessary, and recapped at the end. E-Safety objectives for each unit can be found below:

E-safety objective Year 1	E-safety objective Year 2
To know how to turn off a screen (or turn over the tablet) and tell my teacher if I find something that upsets me	To understand why we should have sensible time limits on screen time
To know to not share videos or photographs with people we don't know	To know what to do if we have concerns about the content we see in games
To know I need an adult's permission to use the internet and why teachers and adults use parental controls to keep me safe	To understand what is acceptable and unacceptable to photograph, for example, sharing photographs that might reflect badly on the school
To understand what 'personal information' is and why it is important to not share this	To know how to stay safe while researching online using a search engine, and to check confusing or surprising online information with a trusted adult
To recognise that not everything they see online is true, and recognise the difference between real and make-believe	To know that other people's work belongs to them and recognise the content on the internet belongs to other people
To explain why it is important to be considerate and kind to people online	To understand what information is appropriate and inappropriate to share online, such as location
E-safety objective Year 3	**E-safety objective Year 4**
To consider copyright when sourcing images for our programmes	To understand the importance of obtaining parental and adult permission when sharing work online
To understand how spending too much time on technology, such as games, can have a negative impact on our well-being	To know what to do if we come across any inappropriate or upsetting content online, and to know that some information online can be deliberately misleading
To know what to do if we encounter inappropriate content while searching online	To consider copyright when sourcing audio, and the legalities around downloading and sharing copyrighted music
To consider what is appropriate to share online, even when the intended audience is well known to us, and the importance of obtaining parental permission to share things online	To understand what a 'digital footprint' is and how to have a positive online reputation

To evaluate the reliability of online content including Wikipedia, news articles and social media, and understand that people can share incorrect information online	To develop safe search habits when using a search engine, including sourcing age-appropriate content and fact-checking information we see online
To recognise when online messages or emails might be unsafe or part of a scam	To consider the importance of obtaining permission when recording, photographing and sharing images and videos of others
E-safety objective Year 5	**E-safety objective Year 6**
To consider personal implications of playing games including violent, costly or addictive computer games	To understand why games have PEGI ratings and recognise the importance of self-regulating use of technology, including games
To know the importance of password security and understand what makes a secure password	To understand the need to observe terms and conditions, age restrictions, and parental consent when registering an account on a website or social media app
To discuss reasons why someone might create misleading or false content online, including for attention, money or influence	To consider the implications of including photographs of ourselves and other pupils in our work and what we post online, recognising the importance of permission
To understand the implications of our 'digital footprint' and online reputation, including social media and on messaging apps	To understand the importance of being respectful in online comments, moderating comments, and changing settings to not allow comments from people we don't know on social media sites
To develop safe search habits when looking for digital content and to be aware of how algorithms and recommendation systems can shape our online experience	To respect the intellectual property rights of others and the need to observe license terms for any content we do not create ourselves
To consider privacy issues online such as location sharing and sharing personal information	To understand what safe and responsible use of AI looks like, including honesty around content that is AI produced, and being able to recognise AI content that is intended to mislead people

In line with the KCSIE 2025 updates, there is now a focus on misinformation, disinformation and conspiracy theories, and our e-safety objectives are reviewed regularly to ensure these are up to date and relevant.

Parents are kept up to date via the school website with our e-safety objectives and newsletters to support them with embedding these at home.

E-Safety in our PSHE Curriculum:

In addition to our Computing days, e-safety is also taught throughout the PSHE curriculum. Concepts are sometimes covered briefly and linked into computing days, such as in Year 1 looking at "Valuing differences" and the importance of being kind. In other lessons, the link to e-safety and computing is more clear, for example in "Keeping Myself Safe" in Year 1 we learn which pictures are safe to share online and which aren't. It is critical that these connections are made clear to the children so that they can recognise the connection between internet safety and other subjects as well as their daily life outside of school.

E-Safety within Safeguarding:

As mentioned previously, E-Safety in a fundamental part of Safeguarding and Child Protection measures. In relation to the "Keeping Children Safe in Education" guidance, monitoring and reviewing our school's online safety education is vital to keep our children safe. We at Tudor have a variety of policies where online safety guidance is provided to staff and parents alike.

These documents include:

- How we Keep Ourselves Safe at Tudor
- Online Safety Policy
- Child Protection Policy

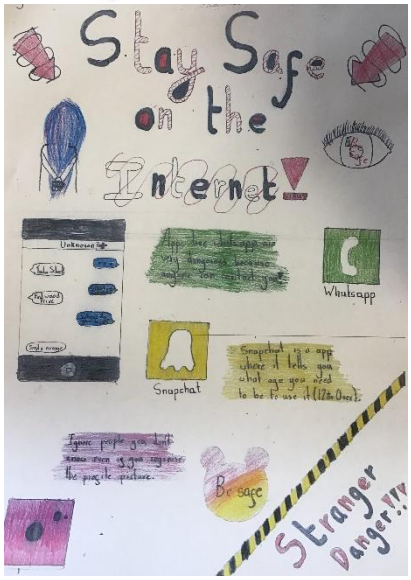
Further information about our Safeguarding links to online safety can be found on our website:

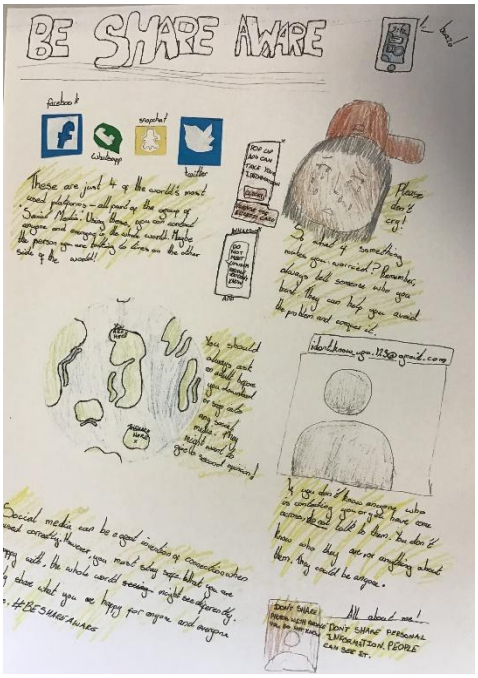
https://www.tudor.herts.sch.uk/page/?title=Safeguarding+and+Child+Protection&pid=82

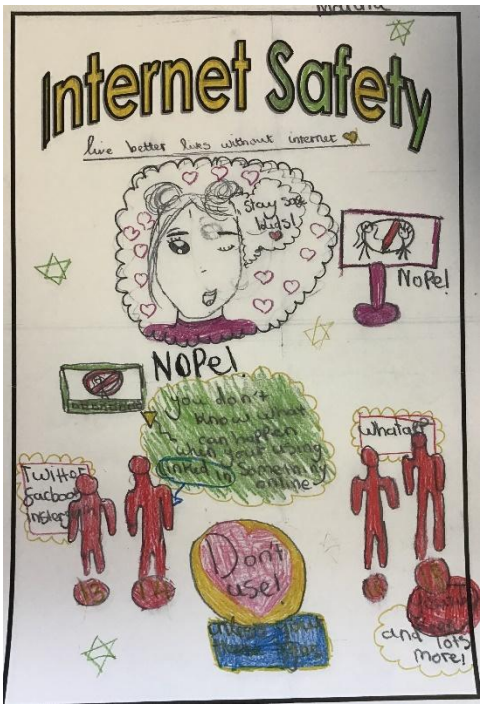
Safer Internet Day:



In addition to the teaching of online safety in class, we also celebrate "Safer Internet Day" every year. This includes a school assembly to all year groups, and some kind of activity to be taught in class. A stand-alone lesson is taught in each class about how to stay safe online. Here are just a few examples of some of the amazing posters our children produced in a recent e-safety day:







Support for Parents:

As e-safety is so critical for children's safety, it is important that we at Tudor work in partnership with parents to ensure children are protected at home as well as in school. Our website has a page dedicated to internet safety, where key information is shared with parents to keep their children safe online at home. This year, we had a visit from Richard Maskrey (School Consulting Ltd) who spoke with our parents about current online trends, how to keep your children safe and where to go for help and support. He created a fact sheet which is attached to the website for parents to access who may not have been able to attend.

Also available on our school website is a link to Hertfordshire Online Safety Newsletters, and a variety of websites and links to videos which parents can access to find further support and advice.

For any further information about eSafety at Tudor school, please follow the hyperlink below to find the "Internet Safety" section of our school website:

https://www.tudor.herts.sch.uk/page/?title=Internet+Safety&pid=164

Outcomes

As a result of our implementation of the computing curriculum at Tudor Primary School, our pupils will be responsible, competent, confident and creative users of information and communication technology. Our students will understand the importance of online safety, and know how to keep themselves safe on all forms of technology and the internet, both in school and at home. They will have a strong knowledge of the fundamental principles of computing, and will have been provided with the opportunity to apply these in a variety of different contexts throughout their time in school. This will give them the confidence and knowledge to apply their understanding with unfamiliar technology, and to build on their skills as they progress in their education.

In a pupil voice survey conducted in Summer 2026, all pupils spoken to shared that they enjoy computing days – many of them citing that they learn something different each time and enjoy the creative elements of the units. Pupils were able to explain the importance of e-safety, and discuss e-safety topics they have learnt about both this academic year and in previous years. Pupils were able to share skills that they have learnt and talk about the technology they have used.



Creating a World Book Day Powerpoint presentation in Year 5.