

Computing at St. Andrew's Newsletter



We are very proud of our computing curriculum here at St. Andrew's. Below you will find information about our learning in computing.

Do pupils enjoy computing lessons?

Children at St. Andrew's enjoy computing lessons. They speak positively about the subject and are engaged during lessons. This has been noticed by teachers, our computing coordinator and Ofsted. One child said *"I learn loads in computing and I get to learn how to program"* and another said *"in computing I can be creative and I am given the freedom to do so."* Pupils know what to do if they find something challenging in computing such as: don't give up, try an alternative method or ask for help if needed. One child described computing as sometimes being *"trial and error"* – this is a great start to children's computational thinking skills! We had a visit from a software engineer who ran workshops with children in Key Stage 1 and Key Stage 2. This enabled children to see the relevance of computing beyond the classroom.

How is the curriculum organised?

The National Curriculum for primary computing can be divided into three key areas: computer science, information technology and digital literacy. At St. Andrew's we teach these key areas through: computing systems and networks, programming, creating media, data handling and online safety. Each year group covers each of these five areas and complete a wide range of exciting activities. Please see the next page for some examples. Children achieve highly in all areas of the computing curriculum and make excellent progress through school.

How do children stay safe online?

Staying safe online is imperative for children at St. Andrew's, especially as devices and technology become more and more available to children and part of our everyday lives. Children are taught about the importance of staying safe online and how to keep themselves safe whilst using technology. This starts in Nursery and continues all the way up to Year 6. Online safety is taught in an age appropriate way and gives the children opportunities to reflect on the advantages and disadvantages of spending time online. Children are able to talk confidently about how to stay safe online. The UK Safer Internet Centre has some good resources for parents about keeping children safe online and explains current issues. Here is the link: <https://saferinternet.org.uk/>

What devices are available to children at St. Andrew's?

We recently invested in ViewSonic interactive whiteboards, which every classroom now has. These replaced our old projector SMART boards. The ViewSonic boards display vivid apps, images, graphics, videos, websites and more. They allow you to write, draw and annotate instantly. We can see that they are having a positive impact on teaching and learning and children are engaging with them well during lessons. We also invested in brand new laptops for the whole school, which children use well to support their learning in computing and other subjects. Children have access to iPads as and when necessary to support their learning in class.

Next steps

As a school, we are currently in the process of looking at how artificial intelligence (AI) can further improve children's learning experiences. Watch this space!

Miss Wallace – Computing Coordinator

A visit from a STEM ambassador



Examples of work

Year 1 2023-24
Computing systems and networks: Improving mouse skills

Wednesday 20th September 2023
L3: To develop mouse skills.

We used Sketchpad to create digital artwork. We changed the background colour and stamped clipart images to create repeated patterns. We clicked, dragged, selected and rotated in this lesson using the mouse.

Digital artwork

- Artwork can be created on a computer.
- We are going to create our own digital artwork.
- We will use different techniques.

Year 1 – Computer systems and networks

Developing mouse skills by creating digital art work.

L5: To create a stop motion animation.

Probably we made the space animation from the album. There was a focus on comparing our work and also what we had done and why. We also made an animation of different scenarios.

- Were the movements small?
- Was the animation fluid?
- Were the frames clear?

Year 2 – Creating media

Creating a stop motion animation.

Thursday 16th January
L4: To program a game.

Children created their own games using Scratch. The images show children working on their projects and the final results.

Year 3 – Programming

Programming a game using Scratch.

22nd March Tuesday 2024
L2: To Log Data from Online Sources within a Spreadsheet

We researched average temperature of cities around the world for March 2nd. We inputted our data into an Excel document.

Country	City	Average March temperature
Lithuania	Arrozdie	22 degrees
UK	Manchester	10 degrees
Spain	Madrid	16 degrees
France	Paris	13 degrees
Turkey	Antalya	18 degrees

Year 4 – Data handling

Logging data from online sources.

HEALTHY SCREEN HABITS

Children created their own apps using MIT app inventor. The images show the design and coding of the apps, along with the final product being tested on an iPad.

Year 5 – Online safety

Discussing healthy screen habits.

L4: To create our app

Children created their apps using MIT app inventor. Children programmed the app and used the mirroring app to test their work. Any issues they had needed de-bugging. Those who completed the task first were able to up level their app by adding functions such as the shaking rubber, changing colours and adding text. The pictures show the coding and the app being tested and used on an iPad.

Year 6 – Programming

Children creating their own apps – designing, coding, de-bugging, testing and evaluating.

Feedback from Ofsted (June 2024):

- All pupils achieve highly in all three areas of the computing curriculum.
- There was good engagement from all pupils in lessons.
- The subject leader had lots of monitoring evidence around pupil knowledge.
- Lessons are presented clearly and teachers have excellent subject knowledge.
- The computing floor books are excellent and showed lots of practical work and computing vocabulary.