

Summer Term 2 Year 1 Computing

Key facts

Children will be able to recognise what 'coding' means in computing – A creative process used to tell a computer how to perform a task. They will also be able to create clear instructions to be used by a computer, selecting sounds and controlling when they are heard, as well as using inputs and conditions to control events and when they happen.

Children will recap and further explore and discuss online risks, such as cyberbullying, posting personal information or accidentally downloading malware, and strategies to deal with them. They will also be able to recognise the importance of age ratings on sites, films and games.

Resources

Laptops – Purple Mash
Helping Hands
Examples of appropriate websites, games and films.

Code- Developing an understanding of instructions logic and sequences

Brief summary/ overview

Children will use this half term to recap and further develop their coding skills; creating clear instructions to be used by a computer and inputting and controlling sounds and events.

Children will also continue to build their understanding of internet safety, discussing online risks and strategies to deal with them, as well as identifying the importance of age ratings.

Prior Knowledge

Children have previously explored instruction and have a good knowledge of online safety, and what to do if they feel unsafe.

Key Vocabulary

Coding, instructions, input, output, condition, control, technology, online risks, strategies, age ratings, appropriate, inappropriate, feelings, safe, unsafe.

Cross curricular links/visits

Spring Term 2 Year 1 Computing

Key facts

Children will learn to create and follow step by step instructions, controlling motion by specifying direction and distance. They will practise using accurate terminology when giving instructions (forward, backward, steps, left, right, half turn, quarter turn etc.).

Children will further explore with Beebots, inputting algorithms and debugging them where necessary. They will also give and respond to feedback to improve their instructions.

Children will be able to record their learning using digital tools; taking photos and uploading them to their story and using voice recordings or adding text to provide descriptions to their audience.

Coding- Develop an understanding of instructions, logic and

Prior Knowledge

Pupils will have experienced beebots in reception and will have had opportunities across the curriculum to give and follow instructions e.g in PE. They will also have practised creating stories previously in year 1.

Key Vocabulary

Instructions, logic, sequence, controlling motion, controlling distance, forward, backward, left, right, steps, half-turn, quarter-turn, algorithm, bug, debug, error, digital tools.

Brief summary/ overview

During this half term the children will explore algorithms, bugs and debugging. They will work both independently and in teams to develop the skills of giving and following instructions, as well as altering them if needed.

The children will also continue to develop the skills of video recording, creating a story and adding voice recordings or text.

Resources

Bee-bots

Bee-bot app on iPads

Laptops - Purple Mash

Cross curricular links/visits

Geography – Amelia Earhart, following directions of a compass and her navigator.

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Key facts

Children will learn to log on to laptops and Purple Mash safely and will recognise the importance of keeping their passwords safe. They will develop their navigational skills of Purple Mash; altering their avatar to reflect themselves, accessing work and saving it for later.

Children will be able to describe examples of technology around the school and in the local community. E.g. Interactive whiteboards, laptops, iPads and mobile phones, radio, social media, television. They will be able to record examples of technology and its uses.

Pupils will also explore e-books and their purpose; discussing how to make stories more interesting through recordings, sounds, music and animation.

Develop an understanding of how to safely connect with others

Prior Knowledge

Children will have experience of logging into Purple Mash, creating their avatar and saving work.

Key Vocabulary

Navigating, ownership, reflection, log in, password, save, technology, animation, recording, music, pictures, background.

Brief summary/ overview

This half term pupils continue to embed and develop their understanding of how to keep themselves and others safe online, whilst enjoying what technology has to offer.

They will secure their knowledge of accessing and saving work and the importance of this and explore the fun that can be had through e-books.

Cross curricular links/visits

History – make links to how technology has changed since the first aeroplane flight.

Resources

Laptops – Purple Mash
Interactive Whiteboard

Autumn Term 2 Year 1 Computing

Key facts

iPads will be used to take photographs. In line with British Privacy Laws, children will be encouraged to ask people for permission before taking photographs of them.

Children will be taught what makes a good photograph and will explore ways to improve this. They will be given a specific brief of something to take a photograph of and explore ways to edit the photo using filters and other editing tools, considering the positive and negative effects this can have on a photo.

Children will explore the photographs taken by others and create a display of their photography.

Children will continue to practise logging into Purple Mash and will develop their speed and navigation of the software.

Use apps to communicate ideas

Brief summary/ overview

This half term children will further embed their knowledge about safely connecting with others and respecting the privacy of themselves and others.

They will learn about the etiquette of taking, editing and sharing photographs containing other people and touch upon the privacy laws surrounding this.

Prior Knowledge

In the previous term, children will have learnt about online safety, safely connecting with others and respecting themselves and others.

Key Vocabulary

Photographs, navigate, edit, effect, design brief, ownership, passwords, feedback, improvements, truthful, filters, sharing, respect.

Resources

Interactive whiteboard

iPads

Laptops – Purple Mash

Cross curricular links/visits

PSHE - Links to online safety.

Art – Editing and reviewing work.

Autumn Term 1 Year 1 Computing Overview

Key facts

- 1) If you see something online that makes you feel uncomfortable, unsafe or worried: leave the website, turn off your computer if you want to and tell a trusted adult immediately
- 2) Don't post any personal information online – like your address, email address or mobile number.
- 3) Think carefully before posting pictures or videos of yourself. Once you've put a picture of yourself online most people can see it and may be able to download it, it's not just yours anymore.
- 4) Keep your privacy settings as high as possible.
- 5) Never give out your passwords.
- 6) Don't befriend people you don't know.
- 7) Don't meet up with people you've met online. Speak to your parent or carer about people suggesting you do.
- 8) Remember that not everyone online is who they say they are.
- 9) Think carefully about what you say before you post something online
- 10) Respect other people's views, even if you don't agree with someone else's views doesn't mean you need to be rude.

Resources

Jessie and friends resources
iPads
Interactive whiteboard
Laptops – Purple Mash
Helping Hands

Developing an understanding of how to safely connect with others

Brief summary/ overview

This half term, pupils will be encouraged to think about how they stay safe on the internet when connecting with others.

They will explore the feelings that this can evoke and learn what they can do if they are worried about something.

Pupils will also begin to develop an understanding of instructions, logic and sequences.

Prior Knowledge

Children will have used laptops, tablets, an interactive whiteboard and beebots in reception.

Key Vocabulary

Computing, coding, connecting, online, feelings, facial expressions, safety, sensible, internet, smart phones, age rating, instruction, direction, movement, verbal, obstacles.

Cross curricular links/visits

PSHE in A1 covers feeling safe, belonging, rights and responsibilities.
Online safety is also covered in PSHF in A2.