



Holmesdale Infant School
Yearly Knowledge and Skills Progression
Subject: Computing
Year group: Reception

The EYFS framework is structured very differently to the National Curriculum, as it is organised across 7 areas of learning rather than subject areas. Each area is split into 17 aspects, all which are interwoven. The most relevant for computing are taken from the following areas of learning:

-Communication and language -Personal Social Emotional Development -Understanding the World

We have identified 3 BIG IDEAS that run through our computing curriculum. These are evident threads that run through the year group

- 1) internet safety
- 2) computer science
- 3) using technology purposefully/IT

Computing units:

Internet safety



Computer science



Using technology purposefully



It will introduce the children to some of the key concepts and vocabulary that will be covered in these three units so that the children have a solid grounding with which to build upon, embed learning and offer repeated practise of key vocabulary throughout the Reception year.

The units do not need to be taught in order but the foundations content will be covered throughout the year as appropriate.

Internet Safety



Knowledge:

- AUT- to know that there are rules that help keep us safe and healthy in and beyond the home when using technology.
- AUT- to begin to understand what is meant by 'personal information' e.g. my name, address and phone number
- SPR- to recognise the people they can trust and share personal information with e.g. parent or teacher
- SPR- To understand that 'online' refers to use of technology on the internet.
- SUM- to recognise that they can say 'no/stop/I'll tell' to somebody who asks them to do something that makes them feel sad, embarrassed or upset in real life or online
- SUM- to know that work they create belongs to them.

Ideas for activities/ Enhanced provision:

- Class discussion about ways in which we can stay safe (Twinkl PPT)
- Introduce the SMART rules and explain that we have these rules in school to help us to stay safe online
- Lots of opportunities for children to access pre-approved games and activities on the interactive whiteboard
- Pictures of healthy and unhealthy/ safe or unsafe activities for children to sort

Skills:

- AUT- to identify an example of personal information e.g. name, number and address
- SPR/SUM- to interact in a safe manner with online games and activities

Computer science



Knowledge:

- To know how to operate a technological device e.g. CD player/Tonie or camera
- To understand that when I use a digital device e.g. a CD player, I am giving it an instruction e.g. if I press X they Y will happen

Ideas for activities/ Enhanced provision:

- Opportunities to interact with online games that require an input from the child to make it work
- Use of beebots and beebots mats to explore what happens when you push the buttons on the beebot
- Use beebot cards to pre-plan and discuss a series of instructions to make the beebot move from one place to another on the beebot mat
- Instruction sequencing pictures e.g. set of pictures for brushing teeth- encourage child to talk through the instructions
- Toni boxes (input buttons) for children to listen to stories

Skills:

- Use a mouse/touch screen to move objects on a screen in order to play a game.
- Begin to verbally compose a set of instructions to move a device
- Select and use a range of technology including online games and digital devices

Using technology purposefully**Knowledge:**

- To know there are ways to use technology to find out information
- To understand how they might use technology to communicate with another person

Ideas for activities/ Enhanced provision:

- Opportunities for whole class ‘research’ during topic discussions. Encourage children to think of things they might like to know about the topic and explain that we can use the internet to find out this information. Model this as a whole class.
- Class discussion about forms of communication- phone, video calls, emails
- Teach children how to use class camera/tablet to take a photo and encourage them to use these devices to take photos of their learning for their WOW books.
- Opportunities for children to create ‘work’ on the IWB to support their topic learning e.g. draw a picture of a pumpkin and have a go at writing their name on their work

Skills:

- Independently take a photo of their own work
- Begin to name their work (on screen) to show ownership
- Make recognisable and purposeful ‘work’ on the IWB e.g. a picture of themselves or writing their name

Vocabulary:

Camera, tablet, on/off, device, interactive whiteboard, instruction, mouse, computer, rules, safety, click/drag, beebot, online, trusted adult, communicate

Barriers to learning:

Adult support/modelling/pre-teach in small groups/1:1 for those struggling to access the online games
Visual prompts to support instructions for taking a photo or creating a particular online activity

Enrichment:

Opportunities for technology within the role play
Opportunities for technology/games/activities on the IWB to support wider learning- number games, letter formation
Safer Internet Day
Tinkering
Using the camera/tablet for taking photos of their own learning

Cultural diversity: understand how people all around the world use technology, invite in a photographer to share how they take photos, listen to digital music/stories from around the world, use global online games (pre-approved)

End points – by the end of the year pupils should be able to:

- I can interact with the IWB by clicking and dragging objects on the screen.
- I can use technology to create a piece of work and name it to show it belongs to me.
- I can understand and explain that I need to ask an adult before going online and can go on a game that has been checked by an adult