



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

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 Nursery 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:

Understanding the World - Development Matters (3-4-Year Olds)

- Talk about what they see, using a wide vocabulary.
- Be aware that there are rules for using the computers and that these rules are there to keep us safe. E.g. ask an adult first/only go on programme adult has chosen

Ideas for activities/ Enhanced provision:

- Opportunities for children to interact with pre-approved games and activities on the Interactive whiteboard

Skills:

- To successfully interact with a pre-chosen game
- To ask an adult for permission to access an online game
- To be able to explain the reason for our safety rules e.g. to keep us safe.

Computer science



Knowledge:

Understanding the World - Development Matters (3-4-Year Olds)

- Be aware that devices have inputs (e.g. I can push a button) and outputs (something happens when I push the button)

Ideas for activities/ Enhanced provision:

- Access to input/output toys
- Engaging with the listening station, turning it on, pressing play, restarting a story
- Interacting with robotic toys, toys that have a switch to make them work and talking about how they make the toy work.
- Opportunities to interact with online games that require an input from the child to make it work

Skills:

- Explore outcomes when pushing buttons/giving an input to a device
- Understand and follow simple instructions within an online game.
- With support- Access a game/information from a website that a trusted adult has shown them e.g. using an interactive game

Using technology purposefully



Knowledge:

Understanding the World - Development Matters (3-4-Year Olds)

- To know that they can use technological devices for a purpose e.g. a camera to take a photo or a CD player or Toni to play music

Ideas for activities/ Enhanced provision:

- Discussion with the children about technology and the fact it can help us with our learning
- Opportunities for mark making on the IWB
- Use/access to torches, sound buttons, push button toys to support their learning
- Access to input/output devices within the role play e.g. washing machine that makes a sound when you push the button
- Access to technology in the form of old cameras and phone to role play taking photos
- With adult support, provide opportunities for them to help you take a photo of their work
- Toni available for children to use to listen to stories and song. Children to use input buttons

Skills:

- **With support, begin to use technology for a purpose e.g. mark making on the IWB, helping an adult to take a photo of their work**
- **Explore and use a range of technology to support their learning e.g. torches, robotic toys, listening station**

Vocabulary:

On, off, input, output, technology, device, listening station, button, tablet, computer, interactive whiteboard, purpose, programme, rules, safe, safety

Barriers to learning:

visual support for activities using widget sequencing, devices with colour coded buttons or visual symbols e.g. for on/off

Cultural diversity:

Look at opportunities to share games or interactive activities that support learning about other cultures
Explore digital toys and where they come from- locate on world map

Enrichment:

Opportunities for technology within the role play
Opportunities for technology/games/activities on the IWB to support wider learning

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

- I can recognise that if I push a button (input) on a device/toy it will have a specific output
- I can interact with a range of technology including toys, IWB in a purposeful way.
- I understand that I can only go on 'online' games and activities that an adult has checked is safe for me.