

Computing Handbook Foundation Stage

Vision for Computing

Through teaching computing we equip children to participate in a world of rapidly-changing technology. A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

At INSERT SCHOOL NAME we intend to

- Enable our children to reach their full potential and recognise their strengths and talent through a progressive, inclusive creative curriculum.
- To further develop the skills learnt in the computing lesson so that they can be used across all subjects. Cross curricular computing throughout the curriculum should be encouraged.
- Access to learning platforms from home will help raise standards and enhance learning (Education City, Reading Plus, TT Rock Stars).

Scheme Of Work

We have a bespoke curriculum that is ever evolving to suit the needs of the children at school. We have recently carried out a review and have adapted it to meet the ever evolving needs of our children at school.

Skills Overview EYFS			
Computer Science	DL & IT Beyond school	Information Technology	
 Be able to give a floor robot instructions to make it move. Use simple software and explain what you are doing. Understand what happens when you click a button or touch an icon. 	 Can identify a device that uses technology. Ask permission before using the Internet. Tell an adult if something worrying or unexpected happens whilst using technology. Talk about technology that is used at home, in school and in the world around them. Use a safe part of the Internet to explore, play and learn. 	 Talk about different kinds of information such as pictures, videos, text and sound. Use a mouse and touch screen to move objects on a screen. Create shapes and text on a screen. 	

In EYFS we are looking to develop the following skills:

EYFS Curriculum Overview

Year EYFS	AUTUMN TERM	SPRING TERM	SUMMER TERM
	Digital Literacy: I am a super surfer	IT: Look at what I can do Basic skills - Mouse control,	Computer Science: I am a computer scientist
	Basic Skills – Mouse control, touch screen control, keyboard	using a touch screen, using a camera, digital drawing	Basic skills - touch screen control, pressing buttons, using directional arrows, cause and effect

Autumn Term - I am a super surfer

What the children will learn:

- Can identify a device that uses technology.
- Ask permission before using the Internet.
- Tell an adult if something worrying or unexpected happens whilst using technology.
- Talk about technology that is used at home, in school and in the world around them.
- Use a safe part of the Internet to explore, play and learn.

Vocabulary

 Button, mouse, icon, keyboard, touch screen, tablet, pc, laptop, camera, radio, smartphone

Ways to support children's learning

- Look at online stories based which look at Internet safety. Talk about the main points in the story. See links at the bottom of the document.
- Go around the house looking for different types of technology.
- Watch episodes of Hector's World short five minute videos which look at different aspects of internet safety. <u>https://www.thinkuknow.co.uk/4_7/hectorsworld/</u>
- •____Supervise the children as they play age appropriate games on a device at home.
- https://www.bbc.co.uk/cbeebies
- https://pbskids.org/ https://www.abcya.com/grades/prek https://primarygamesarena.com/Years/EYFS

Spring Term– Look what I can do

What the children will learn:

- Talk about different kinds of information such as pictures, videos, text and sound.
- •____Use a mouse and touch screen to move objects on a screen.
- Create shapes and text on a screen.

<u>Vocabulary</u>

• Button, mouse, icon, keyboard, touch screen, tablet, pc, laptop, direction, arrows, input and output.

Ways to support children's learning

- Help your child to take photographs with your phone or with a tablet when you are around the house or out for a walk. Turn it into a colour hunt – can you find objects which are red?
- Download Pic Collage app from app store make a poster of the pictures that your child has taken.
- Look at free colouring activities on the internet. <u>https://pbskids.org/games/coloring/</u>
- If you have a pc or laptop then encourage your child to develop their mouse control skills. <u>http://www.crickweb.co.uk/Early-Years.html</u>
- Non flash games
 <u>https://www.bbc.co.uk/cbeebies/games/waffle-the-wonder-dog-puppy-playtime?collection</u>

 <u>=fun-activities-for-toddlers-and-preschoolers</u>

Summer Term - I am a computer scientist

What the children will learn:

- •___Be able to give a floor robot instructions to make it move.
- •____Use simple software and explain what you are doing.
- Understand what happens when you click a button or touch an icon.

Vocabulary

• Button, mouse, icon, keyboard, touch screen, tablet, pc, laptop, direction, arrows, input and output.

Ways to support children's learning

- There is an ever increasing amount of controllable toys on the market if you wish to invest. Codapillar is a good one to start with. Some of the toys such as BeeBots have an online emulator.
- Children are surrounded by instructions they need to follow every day. Talk through the different steps they need to go through when brushing their teeth, getting changed for example.
- Play the game Simon says where the children have to listen out for instructions.
- Traffics lights game get children to move around when you shout RED stop AMBER – Freeze – GREEN Go
- Watch the Baby shark video on YouTube.
- Play Kodable on the Hour of Code Website. <u>https://www.kodable.com/hour-of-code#self-guided</u>



Online safety

At **INSERT SCHOOL NAME** we understand the importance of keeping your child safe online. Here are a few tips and websites to help you and your child understand the message.

Home and Family Guidelines

- Talk together and have fun learning together.
- Involve everyone and agree your family guidelines and rules.
- Remember that sometimes what is acceptable for a Year 6 child is not necessarily acceptable for a Year 3 or Reception child.
- Discuss regularly online safety and go online with your children. Communication is the key to eSafety.
- Keep virus and firewall software up to-date.
- Enable your 'browser safe' search option and/or consider using internet filtering software, walled gardens and child-friendly search engines.
- Keep the computer in a communal area of the house, where it's easier to monitor what your children are viewing. Never let children have webcams, or similar, in their bedroom.
- Talk to your children about why they should not to give out their personal details. If they want to subscribe to any online service then make up a family email address to receive the mail.
- We all love to chat and children are no different. Encourage your children to use moderated chat rooms and never to meet up with an online 'friend' without first discussing it with you.
- Time children spend offline following a range of other activities is equally important. Time spent online should be monitored to help prevent obsessive use of the internet
- Encourage your children, and in fact all family members, to tell you if they feel uncomfortable, upset or threatened by anything they see online.
- Have proportionate responses if the family guidelines are not followed.

Online safety

<u>Thinkuknow</u> website..... this website has been specially developed by CEOP for children of all ages to help them to learn about staying safe online. There's information for parents here too. <u>https://www.thinkuknow.co.uk/Kidsmart.</u>.... help and advice for children using the internet.

https://www.childnet.com/resources/looking-for-kidsmart

<u>Digi Duck's Big Decision</u>...... Esafety book (and more) for KS1 children - A brilliant online safety resource for younger children

https://www.childnet.com/resources/digiduck-stories

<u>Smartie the Penguin</u> – Another fantastic online safety resource for young children.

https://www.childnet.com/resources/smartie-the-penguin

