



# Medium-Term Planning

## Subject: Computing



<b>Term and Year:</b>	Year 1/2 – Autumn Term		
<b>Teacher:</b>	Miss Defty		
<b>Subject:</b>	Computing W/C 06.09.21 Y1: Improving Mouse Skills Y2: What Is A Computer?	W/C 11.10.21 Y1: Introduction to Data Y2: Word Processing	W/C 22.11.21 Y1: Online Safety Y2: Online Safety
<b>Vocabulary that will be taught:</b>	<p>Y1 – account, clipart, computer, log on, log off, mouse, password, resize, screen (monitor), software, tool, username, branching database, categorise, chart, computer, data, information, label, pictogram, record, sort, table, camera, communicate, connect, console, devices, digital footprint, emotion, feelings, instructions, internet, internet safety, laptop, mood, online, personal information, phone, posting, predict, respect, sharing, smart device, smartphone, smart TV, smartwatch, strangers, tablet, trust, wired, wireless</p> <p>Y2 – battery, buttons, computer, desktop, device, electricity, input, invention, keyboard, laptop, screen (monitor), mouse, output, technology, wires, backspace, bold, copy, copyright, cut, delete, highlight, image, import, italics, keyboard, keyboard character, paste, redo, space bar, touch typing, underline, undo, word processing, accept, comment, consent, content, emojis, offline, online, password, permission, personal information, private information, share, terms and conditions, trusted adult</p>		

### National Curriculum Objectives:

- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use logical reasoning to predict the behaviour of simple programs
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

### Computing Skills that will be taught and assessed:

#### Year 1:

- Understanding that computers and devices around us use inputs and outputs, identifying some of these
- Learning where keys are located on the keyboard
- Understanding what the internet is
- Developing control of the mouse through dragging, clicking and resizing of images to create different effects
- Searching and downloading images from the internet safely
- Understanding that we are connected to others when using the internet
- Representing data in tables, charts and pictograms
- Sorting data and creating branching databases
- Identifying where digital content can have advantages over paper when storing and manipulating data
- Recognising common uses of information technology, including beyond school
- Understanding some of the ways we can use the internet
- Logging in and out and saving work on their own account
- Understand the importance of a password
- When using the internet to search for images, learning what to do if they come across something online that worries them or makes them feel uncomfortable
- Recognising when someone has been unkind online
- Learning some top tips for staying safe online
- Understanding how we 'share' information on the internet

#### Year 2:

- Understanding what a computer is and that it's made up of different components
- Recognising that buttons cause effects and that technology follows instructions
- Developing confidence with the keyboard and the basics of touch typing
- Developing word processing skills, including altering text, copying and pasting and using keyboard shortcuts
- Using word processing software to type and reformat text
- Understanding that personal information should not be shared on the internet.
- Learning how to be respectful to others when sharing content online.
- Learning how computers are used in the wider world
- Understanding that personal information should not be shared on the internet.
- Learning how to be respectful to others when sharing content online.

Focus of each lesson 'Can I...' Statement(s)		Activities/Key points
Lesson 1	<b>Y1: To log into a computer and access a website</b> <ul style="list-style-type: none"> <li>• I can recognise what we mean by a computer</li> <li>• I understand why we need to log in to a computer</li> <li>• I can log in and log out of an account on my computer</li> </ul>	Demonstrate how to log in. Give the pupils a printout of their login information, so that they can type it themselves. You may find that some of the children are unfamiliar with both the mouse and keyboard, so take some time to explain how to use them. For the rest of the lesson, the children will explore Sketchpad.
	<b>Y2: To recognise the parts of a computer</b> <ul style="list-style-type: none"> <li>• I can name the key parts of a computer</li> <li>• I can explain that a keyboard contains lots of buttons</li> <li>• I can explain the purpose of different computer parts</li> </ul>	Children will learn the different parts of a computer. They will label a picture of a computer with the correct parts and explain what each part is used for.
Lesson 2	<b>Y1: To develop mouse skills</b> <ul style="list-style-type: none"> <li>• I can log in and log out of an account on my computer</li> <li>• I can use Sketchpad to fill sections and stamp Clipart into place</li> <li>• I can navigate a computer using a mouse</li> <li>• I understand what we mean by drag and click</li> </ul>	Children will use Sketchpad to create a simple background. They will then stamp Clipart over the top to create a repetitive image. Demonstrate moving a Clipart stamp by using the 'Select' tool. Clicking and dragging changes the stamp's position.
	<b>Y2: To recognise how technology is controlled</b> <ul style="list-style-type: none"> <li>• I know that people control technology</li> <li>• I know that technology follows instructions</li> <li>• I can predict what technology will do</li> </ul>	Children to label a robot and explain how it works. Their robot can do anything they want. The point of the activity is for children to recognise that it will need buttons to control it (inputs), and perhaps even lights/sounds (outputs) to see what it's doing!
Lesson 3	<b>Y1: To use mouse skills to draw and manipulate shapes</b> <ul style="list-style-type: none"> <li>• I can log into a computer</li> <li>• I can click and drag objects to change their size or position</li> <li>• I can use a mouse to carefully position shapes</li> <li>• I can move shapes in front of or behind each other</li> </ul>	Children to use "Sketchpad" to build on previous learning children use the mouse to draw shapes and move these shapes using drag and drop techniques to create some work in the style of Wassily Kandinsky
	<b>Y2: To recognise technology</b> <ul style="list-style-type: none"> <li>• I can suggest what might have a computer inside</li> <li>• I can explain why I think this</li> <li>• I can suggest what the technology does</li> </ul>	Explain to the children that they are going to go on a 'Technology Safari' around school and they'll need to keep their eyes peeled for technology that they see.
Lesson 4	<b>Y1: To use a range of tools to create desired effects</b> <ul style="list-style-type: none"> <li>• I can log into a computer</li> <li>• I can identify key aspects from a story for my illustration</li> <li>• I can use drag and drop to resize and reposition objects</li> <li>• I can use a variety of digital painting tools to create different effects</li> </ul>	Children will be drawing pictures of scenes from 'The Three Little Pigs' on Sketchpad. The children will need to think about the paintbrushes that they will use to create the different textures, for example: 'Sketchy', 'Fur' and 'Web' might be useful for creating the straw house.
	<b>Y2: To create a design for an invention</b> <ul style="list-style-type: none"> <li>• I can create a detailed plan</li> <li>• I can include an input and output as part of my invention</li> <li>• I can explain how it works, including how to control it</li> <li>• I can label my design clearly</li> </ul>	Explain to pupils that they're going to be inventors and create their own invention, using all the knowledge they've learned about computers all around us. Their invention will have some kind of computer inside of it, but what it does is entirely up to them.
Lesson 5	<b>Y1: To understand how to layer shapes to create an image</b> <ul style="list-style-type: none"> <li>• I can identify key features of my face, breaking it down into simple shapes</li> <li>• I can use click and drag to create and layer simple shapes</li> <li>• I can use different tools to create a desired effect</li> <li>• I can resize, reposition and change the order of shapes</li> </ul>	The children are to draw self-portraits using Sketchpad. The children should choose appropriate tools in Sketchpad to draw each facial feature to create their self-portraits.
	<b>Y2: To understand the role of computers</b> <ul style="list-style-type: none"> <li>• I can explain where computers are used</li> <li>• I can suggest what their job is</li> <li>• I understand that computers work together</li> </ul>	Explain that we're going to be learning what computers do through roleplay in a shop setting. In some shops, a computer is tasked with keeping track of when items are running out, but often it's a person who is left to keep track of what needs replacing and ordering more, so having a database is really valuable.

Lesson 1	<p><b>Y1: To represent data in different ways</b></p> <ul style="list-style-type: none"> <li>• I know that data can be shown in different ways</li> <li>• I can represent data in different ways</li> <li>• I can answer questions about the data using my representation</li> </ul>	<p>Show children the Zoo map, showing different numbers of animals in each enclosure. Explain that you want to remember how many of each animal there are so that you could tell someone at home. You are not allowed to take the Zoo map with you. Encourage the children to find easy ways of showing which animals there are more, or fewer of. Ask the children to try representing the information in a different way.</p>
	<p><b>Y2: To begin to learn to touch type</b></p> <ul style="list-style-type: none"> <li>• I can find keys on a computer keyboard</li> <li>• I can identify the home keys on a computer</li> <li>• I understand how to type capital letters using 'shift'</li> </ul>	<p>People who type really quickly learn something called 'touch typing', which means that they know how to find the letters without looking at the keys. The best way to learn is to practise a little bit every day so that you can become quicker and start to recognise where the letters are. Children to work at their own pace to get as far as they can working through the TypingClub lessons.</p>
Lesson 2	<p><b>Y1: To use technology to represent data in different ways</b></p> <ul style="list-style-type: none"> <li>• I can navigate a computer using a mouse</li> <li>• I can type using a keyboard</li> <li>• I understand that data can be shown in different ways</li> <li>• I can represent data in different ways</li> </ul>	<p>Ask children to remind you of how they represented the number of animals at the zoo in the previous lesson. explain that today, they will show this information in interesting ways, using the computer. They create a pictogram.</p>
	<p><b>Y2: To understand how to use a word processor</b></p> <ul style="list-style-type: none"> <li>• I can type a sentence into a word processor</li> <li>• I can select all the text and make it bold or in italics</li> <li>• I can explain how to make other changes using a word processor</li> </ul>	<p>Pupils are going to type up the first page of the book that they have chosen. Before they start, ask if the children know how to type a capital letter. Discourage them from using the Caps Lock key, instead explain that it is easier to hold down the Shift key and tap the letter. Introduce some other keyboard shortcuts.</p>
Lesson 3	<p><b>Y1: To collect and record data</b></p> <ul style="list-style-type: none"> <li>• I can identify different minibeasts</li> <li>• I can record the number of different minibeasts I see</li> <li>• I can represent this data digitally</li> </ul>	<p>Explain to children that they're going to go on a hunt for minibeasts. tell children that you want them to find out which minibeast is most commonly found on the school grounds. Explain that they're going to select the five minibeasts they found the most of and represent the data in different ways.</p>
	<p><b>Y2: To understand how to add images to a text document</b></p> <ul style="list-style-type: none"> <li>• I can use keyboard shortcuts to alter text</li> <li>• I know how to search for and find an appropriate image</li> <li>• I can import and alter an image in a document</li> </ul>	<p>Share the newspaper website link of either 'First news live' or 'CBBC Newsround' with the children. Discuss and demonstrate the aspects of the website which allow us to move around or 'navigate' the site, such as the forward and back buttons. Show how to select the links and move between sections of the site to discover different information. Ask children to use images and text editing to create a newspaper article about 'The Gingerbread Man', reminding them that they should show off all of their skills learned in the topic so far rather than spending too much time finding an image or typing the story.</p>
Lesson 4	<p><b>Y1: To sort data</b></p> <ul style="list-style-type: none"> <li>• I can identify and categorise different animals</li> <li>• I can click and drag objects</li> <li>• I can identify questions to sort data in the most efficient way</li> <li>• I can create a branching database</li> </ul>	<p>Children to design a Science game They should create questions to sort the animals then practise their mouse skills to click and drag the correct animals into either the yes or no boxes. They can test their game by clicking 'play'.</p>
	<p><b>Y2: To create a poetry book using sources from the internet</b></p> <ul style="list-style-type: none"> <li>• I understand how to use text styles to create headings and subtitles</li> <li>• I can copy and paste text into a document</li> <li>• I understand the importance of crediting source materials</li> </ul>	<p>Explain to the class that they are going to use copy and paste to create a poetry book of poems from the internet. Give the children some time to find some of their favourite poems they have come across. They will then copy and paste a poem they like, add a relevant picture and alter the formatting, text and layout to make it look more attractive. They can then repeat this process for a second and third poem, but they should only copy one poem per page. Remind children that they must include the name of the person who wrote the poem and which website they copied it from.</p>
Lesson 5	<p><b>Y1: To design an invention to gather data</b></p> <ul style="list-style-type: none"> <li>• I understand that computers understand different types of input</li> <li>• I can design a computerised invention to gather data</li> <li>• I can explain how my invention works</li> </ul>	<p>Explain to pupils that they are going to be inventors! They can be very creative with their design (i.e. it doesn't have to be something that they could actually make); however, it does have to behave like a computer. Once they have come up with their idea, they go to 'Sketchpad' to draw their inventions, adding labels and information to explain how it works.</p>
	<p><b>Y2: To understand what happens to information posted online</b></p> <ul style="list-style-type: none"> <li>• I can explain what online information is</li> <li>• I know what is safe to share online</li> <li>• I know who to talk to if something is shared that makes me feel sad or worried</li> </ul>	<p>Briefly recap the story of 'The Three Little Pigs'. Explain that the pigs and their mum shared some information online during the building of their new homes and together we are going to think about whether we think it was safe to share that information online. Give each pair of pupils a copy of the <i>Activity: Is it safe to share?</i> to complete.</p>

Lesson 1	<p><b>Y1: To know what the internet is and how to use it safely</b></p> <ul style="list-style-type: none"> <li>• I understand what the internet is</li> <li>• I know how to offer advice to anyone that is being treated unkindly online</li> <li>• I know who to go to when I need help and advice with online matters</li> </ul>	<p>Read the class a story called 'Smartie the Penguin'. Explain to the children that they will create their own 'Online safety top tips booklet' for keeping safe on the internet.</p>
	<p><b>Y2: To know how to keep things safe and private online</b></p> <ul style="list-style-type: none"> <li>• I know what passwords are for</li> <li>• I can explain how to create a strong password</li> <li>• I know what information is private and can explain how I can keep this private</li> </ul>	<p>Discuss with the children how we keep things safe. Hand out the Activity: Private and personal information. Ask children to sort the information out into 'private' and 'personal'.</p>
Lesson 2	<p><b>Y1: To understand different feelings when using the internet</b></p> <ul style="list-style-type: none"> <li>• I can recall what the internet is</li> <li>• I can recognise advice to stay happy and safe online</li> <li>• I can provide advice on ways to stay happy and safe online</li> </ul>	<p>The children will look through three online scenarios involving Bella the Dog and answer questions about what she should do in each.</p>
	<p><b>Y2: To explain what should be done before sharing information online</b></p> <ul style="list-style-type: none"> <li>• I understand why I ask permission</li> <li>• I can explain who I need to ask permission from before sharing content online</li> <li>• I can explain people's feelings if I share things online without their permission</li> </ul>	<p>Share Michael's and Joel's stories with the class. Discuss the stories and answer the questions regarding sharing personal information.</p>
Lesson 3	<p><b>Y1: To understand how to treat others, both online and in-person</b></p> <ul style="list-style-type: none"> <li>• I can recall the top tips for using the internet safely</li> <li>• I can recognise how actions on the internet can affect others</li> <li>• I can understand the ways to use the top tips to be in control of my actions when on the internet</li> </ul>	<p>Read the children the story on the link: 'Digiduck's big decision'. Children to roleplay a conversation between Digiduck and Wise_Owl about being a kind and positive internet user.</p>
	<p><b>Y2: To explain why I have the right to say no and deny permission</b></p> <ul style="list-style-type: none"> <li>• I can explain why I have the right to say no</li> <li>• I know who to ask for help if I am unsure or feel pressure to do something</li> <li>• I can explain why I need to ask a trusted adult before clicking 'accept'</li> </ul>	<p>Discuss how the children might be asked their permission to share content of themselves online, such as pictures from family members or classwork on the school website. Children may also be asked to share information and try new things online. Friends might try and persuade them to try out new games that may not be suitable age rating, people may try and ask them for private information. Tell the children that just like when you say no offline, you have the right to say no online as well. This means denying permission of approval. We can choose whether or not content of us is shared online.</p>
Lesson 4	<p><b>Y1: To understand the importance of being careful about what we post and share online</b></p> <ul style="list-style-type: none"> <li>• I can understand the meaning of 'sharing' and 'posting' information online</li> <li>• I can understand what 'digital footprint' means</li> <li>• I can recognise the information types of my own digital footprint</li> </ul>	<p>Children will use the Activity: Digital footprint to write down all the ways they use the internet, including which websites they visit and the types of information they may share or post.</p>
	<p><b>Y2: To learn strategies that will help me decide if something I see online is true or not</b></p> <ul style="list-style-type: none"> <li>• I can explain the difference between things that are 'imaginary', 'made up' or 'make believe' and those that are true or real</li> <li>• I can explain why some information I find online may not be true</li> <li>• I can explain why people may post things online that are not true</li> </ul>	<p>Explain to the children that something is real if it exists or existed and we can see, feel or touch it, or it is known knowledge. Explain to the children that not everything they read or see online is true. Share three strategies pupils can adopt to check to see if something is true online.</p>