



# Mendell Primary School

Aspire Challenge Achieve

## Medium Term Plan Design Computing



<b>Year Group:</b> 1		<b>Term:</b> Autumn #1 2021		<b>Teacher:</b> Nicole Morning		<b>Subject lead:</b> Justin Cowley		<b>Overview: Online safety and an introduction to programming:</b> Chatting online, sharing images and videos. Algorithms and simple loops.				
<b>Links to other learning:</b> PHSCE		<b>Prior Learning:</b> F1: When buttons on a technological toy are pushed, they will behave in different ways F2: Technological toys need to be instructed to achieve an outcome.			<b>Future Learning:</b> In Y2 children will be using algorithms to predict the behaviour of a computer. They will be introduced to events and repeating loops			<b>Risk Assessment:</b> Safeguarding		<b>Teacher CPD:</b> Please read the CEOP online safety toolkit prior to the lessons.  You must complete level A of Code.org including watching the relevant videos included in the course. This must be completed prior to commencing teaching ( <a href="https://studio.code.org/s/coursea-2020">https://studio.code.org/s/coursea-2020</a> )		
<u>Learning Intention</u>	<u>Real Life Links</u>	<u>Lesson Outline</u> (Key Questions in colour)						<u>Resources</u>	<u>Vocabulary</u>	<u>Lowest 20% Adaptations</u>		
1	- I know to ask permission before posting images or videos of others online - I know who to speak to if anything happens online that worries or upsets me	<p><b>Online safety</b> <b>Sharing pictures and videos.</b> <b>Set the scene: This year we will be learning how to take pictures and videos and will want to then be able to share them with others.</b> <b>There is some learning we need to do first...</b></p> <ul style="list-style-type: none"> <li>- Watch the Jessie and Friends video (Episode 2) <a href="http://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/">www.thinkuknow.co.uk/parents/jessie-and-friends-videos/</a>. Use the following questions to support understanding: <b>How did lots of people end up seeing the pictures of Jessie, Tia and Mo?</b> (They sent them to people who then sent them to more people) <b>How did Mo feel when the picture of him looking like a toad was shared with other people?</b> (sad) <b>How did the friends get help when they needed it?</b> (They told their teacher) <b>What did Miss Humphrey say she would do to help?</b> (She would ask all the children who had copies of the pictures to delete them)</li> <li>- Explain that sometimes things happen online that can make us feel worried. Let them know that if anything ever happens that worries or upsets them, they can always come to you or another trusted adult for help. This is called TAG (Tell a grown-up)</li> <li>- Split the children into small groups (4 to 6) and provide copies of worksheet 1 (discussion questions). Discuss answers together as a group and correct any misconceptions. Confirm that when we share a picture or video of someone we must always think about how it might make others feel.</li> <li>- Explain that just like when we do something that involves another person (hug them, play with their toy, borrow something) we should always ask permission. This means that we ask if they are happy for us to do it or not. Remind the class that it is always okay for someone to say 'no'. Explain that when they are online, if they are thinking of sharing a picture or video of someone else then they should always ask permission first. Work in pairs and complete worksheet 2 (scenarios). Discuss answers as a whole class.</li> <li>- Encourage the children to think about ways they could ask for permission. What sentences could they say? Use Jessie's questions as example sentence starters (from the scenario sheet); Is it okay if I . . . ? Can I . . . ? Do you mind if I . . . ? Model how to use these sentence starters (for example 'Is it okay if I play with your toy?').</li> <li>- In their books the children are to write sentences using the sentence starters to ask permission to either take a photograph or share a video online.</li> </ul>						Large screen to show video  CEOP lesson toolkit  Worksheets 1 & 2	Online Images Videos Trusted permission			

			Exit pass for lesson: Complete the sentence (verbally/pictorially/writing) 'Why do I need to ask permission to share an image?' (In case the person does not want their image shared)			
2	- I know how to behave online - I know who to speak to if anything happens online that worries or upsets me		<p><b>Online safety</b> <b>Chatting online.</b> - Ask the children to raise their hand if they have ever chatted to a friend or family member online. <b>Who have they spoken to? How did they do this ?</b> (This can include video-chatting). Explain that they should only video-chat or chat online with family and trusted friends that they know offline and an adult should always be with them when they do. <b>Ask the children what TAG stands for?</b> Recap TAG.</p> <p>- Display worksheet 3 (scenarios), ask the children to discuss in pairs their answer for each scenario and then discuss as a class.</p> <p>- Re-watch the Jessie and Friends song in episode 2 <a href="http://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/">www.thinkuknow.co.uk/parents/jessie-and-friends-videos/</a>. Give each child a copy of the lyrics sheet (worksheet 4) and display on the screen. Talk through the lyrics and then sing together.</p> <p>- Ask the group if talking to friends and family offline is the same as talking to friends and family online? Explain that you should always treat people kindly offline and online and people should do the same for you. Let them know it's never okay for anyone to say nasty things when chatting online or to make them do anything they don't want to do. It's always okay for the children to say 'no' and to TAG.</p> <p>- In their books the children are to write a sentence/draw to say who it is okay to chat with online and then what they should do if they are worried, scared or sad about anything that happens online.</p>	Large screen to show video  CEOP lesson toolkit  Worksheets 3 & 4		
3	- I know to only play online games with people I know offline - I know who to speak to if anything happens online that worries or upsets me	Designer, inventor,	<p><b>Online safety</b> <b>Online gaming.</b> Watch Jessie and Friends episode 3 <a href="http://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/">www.thinkuknow.co.uk/parents/jessie-and-friends-videos/</a>. Use the following questions to check understanding. <b>What were Jessie, Tia and Mo's power wands in the Alvelzon game? How did the 'stranger' trick Jessie and her friends into telling her their power words? What did Jessie do when the 'stranger' tricked them in the game? Did Jessie know that the 'stranger' was really her sister Amber? What did Dad tell Jessie, Tia and Mo to do with their power words after they were shared and no longer private?</b> (Answers provided on CEOP worksheet)</p> <p>- Ask the children if they like to play games online (recap what is meant by 'online') What are their favourites? Are there any games they don't like? Let the children know that they should only play online games with people they know offline, should never tell anyone their passwords (unless it's a parent or carer) and should always ask an adult if it's okay to play a game as some are meant for older children and grown-ups.</p> <p>- Play the 'Playing online games' board game (worksheet 5) in table groups. You will need dice and counters to play</p> <p>- Reinforce the message that if anything makes them feel scared, worried or sad while playing games online then they should TAG.</p> <p>- Take photographs of children playing the board game and evidence in books. Children to reflect in their books and say how they will stay safe when playing online games.</p>	Large screen to show video  CEOP lesson toolkit  Worksheets 5 (in colour)  Dice  Counters  Camera to take photographs of children playing board game.		
4	- I know what an algorithm is - I can order blocks in a logical sequence		<p><b>Coding</b> <b>Code.org – Course A</b></p> <p>- As a class watch the video 'Safety in my online neighbourhood' to recap online safety. <a href="https://studio.code.org/s/coursea-2020/lessons/1/levels/1">https://studio.code.org/s/coursea-2020/lessons/1/levels/1</a> . Discuss any misconceptions.</p> <p>- Write the following statements on the board in a random order:</p> <ul style="list-style-type: none"> <li>- Push your chair backwards</li> <li>- Stand up</li> <li>- Move behind your chair</li> <li>- Push your chair under the table</li> </ul> <p>- Ask the children to put them into the right order so that the instructions work. Explain that the children have just put instruction blocks into a logical (makes sense) sequence and that today's lessons online are all about putting sequences into the correct order. Explain that a set of instructions is called an algorithm and can be used to instruct a computer.</p> <p>- Recap the need to keep passwords and user information secret. Give out each child's picture login.</p> <p>- Demonstrate how to access the internet (using Google Chrome on laptop or Safari on ipads). Show the children how to search for our school website and where to find the Code.org link.</p>	Ipads or laptops (one per child)	Algorithm Programming Code Internet Google chrome Safari	

			<ul style="list-style-type: none"> <li>- Demonstrate how children access the lessons, what they must do to complete a lesson and how they move to the next lesson. Show children how to restart a lesson and what to do if they are stuck.</li> <li>- Children work through Course A during lessons 4-6.</li> <li>- In their books, the children are to write in their own words what an algorithm is and what it can be used for.</li> </ul>			
5	<ul style="list-style-type: none"> <li>- I can debug simple algorithms</li> <li>- I can order blocks to create a simple algorithm</li> </ul>		<p><b>Coding</b>  <b>Code.org – Course A (continued)</b></p> <ul style="list-style-type: none"> <li>- Recap: Ask the children what an algorithm is. (An algorithm is a step by step set of instructions for solving a problem or completing a task)</li> <li>- Write the following algorithm on the board and explain that it is an algorithm to clean your teeth in the morning: <ul style="list-style-type: none"> <li>- Pick up your toothbrush</li> <li>- Turn on the tap</li> <li>- Hold your toothbrush under the water</li> <li>- Put the toothbrush in your mouth</li> <li>- Rub your teeth with the toothbrush for two minutes</li> <li>- Remove the toothbrush from your mouth</li> <li>- Put toothpaste on the toothbrush</li> <li>- Put the toothbrush away in the cupboard</li> </ul> </li> <li>- Ask the children if they can spot anything wrong with this algorithm. Discuss their answers. Ask the children to work out what they need to do to make the algorithm work. Explain that an error in code is called a bug and fixing it is called debugging the code.</li> <li>- Recap the need to keep passwords and user information secret. Give out each child's picture login.</li> <li>- Demonstrate how to access the internet (using Google Chrome on laptop or Safari on ipads). Show the children how to search for our school website and where to find the Code.org link.</li> <li>- Demonstrate how children access the lessons, what they must do to complete a lesson and how they move to the next lesson. Show children how to restart a lesson and what to do if they are stuck.</li> <li>- Children continue to work through Course A.</li> <li>- In their books, the children are to write a sentence to describe what they have learnt from today's lesson. Provide a sentence starter 'Today, in computing, I learnt . . . . .'</li> </ul>	Ipads or laptops (one per child)	Algorithm Debug Error	
6	<ul style="list-style-type: none"> <li>- I know that a loop is a repeated instruction</li> <li>- I can use repeat blocks to create a loop</li> </ul>		<p><b>Coding</b>  <b>Code.org – Course A</b></p> <ul style="list-style-type: none"> <li>- Recap: Ask the children what an algorithm is and ask them to explain 'debugging' (Debugging is the process of detecting and removing existing and potential errors in code which are known as bugs)</li> <li>- Explain to the children that you are going to write some instructions on the board and that you would like them to follow them. Write 'Stand up', then 'Sit down', now write 'Stand up' and then 'sit down'. Continue writing each step on the board until you have approximately 10 of each instruction. Ask the children what is the problem with writing code like this? (It takes up a lot of space, it takes a long time to write, there are lots of opportunities to make mistakes)</li> <li>- Write on the board 'Stand up and sit down 10 times'. Ask the children to follow the instruction. Explain that they have just followed a 'loop' which is a repeated instruction.</li> <li>- Recap the need to keep passwords and user information secret. Give out each child's picture login.</li> <li>- Demonstrate how to access the internet (using Google Chrome on laptop or Safari on ipads). Show the children how to search for our school website and where to find the Code.org link.</li> <li>- Demonstrate how children access the lessons, what they must do to complete a lesson and how they move to the next lesson. Show children how to restart a lesson and what to do if they are stuck.</li> <li>- Children continue to work through Course A.</li> <li>- In their books, provide children with a challenge sheet. Children are to identify the error and suggest what the correct instruction should be so that the algorithm works correctly.</li> </ul>	Ipads or laptops (one per child)	Algorithm	

