Mendell Primary School

Aspire   Challenge   Achieve

Medium Term Plan Design Computing

Year Group: 3	Term: Autumn #1 2021	Teacher: Jessica Hindley	Subject lead: Justin Cowley	Overview: Online safety and an introduction to programming: Online friendships, sharing photos and videos, Live streaming Predicting outcomes, Introduction to binary and conditionals
Links to other learning: PHSCE	Prior Learning: In Y2 children used algorithms to predict the behaviour of a computer. They were introduced to events and repeating loops	Future Learning: In Y4 children will be using more advanced conditionals, nested loops and 'if' statements.	Risk Assessment: Safeguarding	Teacher CPD: Please read the CEOP online safety toolkit prior to the lessons. You must complete level C of Code.org including watching the relevant videos included in the course. This must be completed prior to commencing teaching (https://studio.code.org/s/coursec-2020?section_id=3503834)

	Learning Intention	Real Life Links	Lesson Outline (Key Questions in colour)	Resources	Vocabulary	Lowest 20% Adaptations
1	- I understand how my actions can make someone feel online. - I know what to do if someone is being unkind to me or my friend online		**Online safety** *Online friendships / being kind online.* - Watch 'Block him right good Alfie' (Episode 1) http://www.thinkuknow.co.uk/8_10/watch/. Use the following questions to support understanding: What did you think? What did you like about the video? What different things to Sam, Ellie and Alfie do online? (For example, they make videos, talk to people, learn to sing, share their songs) What problem did Alfie face at the beginning of the cartoon? (Another gamer messaged Alfie, asking to game with him, Alfie said no as he had to go to school) How did the gamer make Alfie feel? (Happy at first and then uncomfortable and worried when he started making threats) What did Alfie do when he realised something wasn't right? (Didn't reply. Told a grownup TAG, blocked the gamer, reported to the website) What happened when Selfie's video was made public? How did it make them feel? (People they didn't know wrote nasty or strange comments. Received links to adverts. They felt worried and uncomfortable) - Explain that people should only chat to those who they know offline when they are using apps or games. If someone who they do not know tries to chat to them, it is okay to ignore them, block them and tell a grownup TAG. - Ask the class Who wrote a mean comment about Alfie? (The Popcorn Wizards) Who liked the comment? (Sam) Why wasn't this a kind thing to do? (It might upset Alfie. Sam is meant to be Alfie's friend) - Explain that when we write or post something online we must always think about how we might make the other people feel (relate to our four school rules) - In groups or pairs make a list of positive words that Ellie, Alfie and Sam could use to describe each other. - Discuss what makes a good friend (kind, good listener, supportive, makes you feel happy). - Write on the board 'What would a good friend do if someone was being mean to their friend in school?' (not join in, tell a teacher or parent, tell the person to stop being mean, check that their friend is okay. Discourage any suggestions of retaliation and discuss why that would not be helpful) - Discuss that a good friend should do these things if someone is being mean online too. - Use worksheet 2 and ask the children to write down 3 things that Sam or Alfie could do to be a good online friend to Ellie. Exit pass for lesson: Complete the sentence (verbally/pictorially/writing) 'Name one thing I could do if someone is being mean to my friend online?'	Large screen to show video CEOP lesson toolkit Worksheet 2	Online Images Videos Trusted permission	

2	- I know to ask permission before I share anything online - I know who to speak to if anything happens online that worries or upsets me		**Online safety** ***Sharing photos and videos.*** – Recap the work from last lesson. What things could you do if someone is being unkind to one of your friends online? - Watch 'Episode 2 – Who's Magnus?' http://www.thinkuknow.co.uk/8_10/watch/. Use the following questions to chat about the cartoon. What did you think? What did you like about this episode? What does Sam do with Megan's baby photo? Shares the photo and makes it public. How does Megan feel and what does she do in response? She feels angry/upset. She uses Sam's account to write a mean comment about Ellie and Alfie. What upsets Ellie and who does she turn to? She thinks that Sam is posting mean comments about her. Megan is unkind to her and she loses the guitar-off. She turns to Magnus, who she has met online. Is Magnus the best person to support Ellie? Who else could help? Ellie has only just met Magnus online and doesn't know him 'in real life', so he is not a good source of support for her. It would be better to talk to a close friend, family member or another adult she trusts. - Explain that it is important to think about how someone else might feel if you share a photo or video of them. Sometimes people share photos or videos that might be unkind, or upset or embarrass other people. When does this happen in the cartoon ? (Sam shares a baby photo of Megan) - Display worksheet 3 on the screen. Read each scenario and ask the children to show their answers using their thumbs. Discuss the answers as a group. - Discuss the meaning of the word 'permission' (asking someone if it is okay to do something). Ask the group where or when they might need to ask permission. - Provide the children with worksheet 5 and discuss what features they can see that would help keep Alfie safe online (profile picture is not a real picture, user name does not include his name, privacy is set to friends only). Ask the children to read each statement on the worksheet and decide if this is a safe or unsafe thing for Alfie to do. Discuss their answers.	Large screen to show video CEOP lesson toolkit Worksheets 3 & 4		
3	- I know how the difference between positive and negative attention - I know who to speak to if anything happens online that worries or upsets me	Designer, inventor,	**Online safety** **Live Streaming** - Explain that today we are going to explore different types of attention. Discuss the meaning of the word 'attention' (where someone takes notice of you). - Explain that sometimes people get attention for doing positive things but sometimes people do negative things to get attention. As a group generate examples of positive and negative things people do for attention. Now point out that when someone gives someone else attention, this can also be positive or negative (for example, saying well done or making a mean comment). - Read the task on worksheet 6 as a group. Then ask the children to complete the activity. Discuss their answers. Remind the class of the importance of telling a trusted adult if they experience negative attention online or if anything worries or upsets them. - Display the scenario from worksheet 7 on the board. In their books, the children are to write a message to Selfie to advise them on what they can do to make their live stream safer (for example, privacy settings, understanding the difference between positive and negative attention). Direct the children to the CEOP 8-10s website to help them (https://www.thinkuknow.co.uk/8_10/stay-safe/)	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 can predict the outcome from a sequence of code - I know how to create a strong password and why		**Coding** **Code.org – Course C** - As a class watch the video 'Password Power-Up to recap password safety. https://studio.code.org/s/coursec-2020/lessons/2/levels/1?section_id=3503834 . Discuss any misconceptions. - Chn working in pairs. Blow up a balloon and hold it at the neck (don't tie it). Ask the children in their pairs to suggest what might happen if you let go of the balloon. Discuss their answers and write them on the board. Let go of the balloon and see if any pairs were correct. Do the same thing again but this time tie the balloon off. Can the suggest what will happen now? Were they correct. - Explain that they have just made predictions about future events using information they were given and knowledge they already have. Algorithms allow us to do the same thing, we can predict the behaviour of a computer or device from the sequence of code we are given which is what the first lessons on Code.Org are about today. - Give out each child's picture login. - 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.	Ipads or laptops (one per child) Balloons	Algorithm Programming Code Internet Google chrome Safari	

	this is important		- 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. - Children work through Course D during lessons 4-6. - In their books, the children are to write in their own words how they can create a safe password and why it is important.			
5	- I know what 'binary' means and how computers use binary		**Coding** **Code.org – Course C (continued)** Give out each child's picture login. - Watch this video as an introduction to Binary https://www.youtube.com/watch?v=hvteVokz7jE (only watch first 5:20 mins). Discuss why computers have to use binary instead of decimal numbers (because computers can only work with on/off so everything is either a 1 or a 0. - 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. - 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. - Children continue to work through Course C - - 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 . . . .'	Ipads or laptops (one per child)	Algorithm Debug Error	
6	- I know what a conditional is and can use it to decide an outcome		**Coding** **Code.org – Course C** - 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) - Write on the board 'When I blow my whistle, start jumping on the spot. When I clap my hands, stop jumping'. Ask the children to stand up and then switch between whistle blowing and clapping so that the children follow the instructions. Remind the children that they have been following an algorithm. The whistle blowing and clapping are called events. - Key knowledge for teacher – an event is an action or occurance, that is recognised by the software, as a result of the user or another source (for example, a mouse click is an event) - Change the algorithm on the board. 'When I blow my whistle, if you are a girl then jump on the spot, if you are not a girl then turn round repeatedly. When I clap my hands, stop'. Ask the children to follow the algorithm. Explain that a conditional in programming tells the computer to do different actions depending on if the condition is true or false (in this case, if you are a girl or not). - Recap the need to keep passwords and user information secret. Give out each child's picture login. - 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. - 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. - Children continue to work through Course C - In their books, children are to write a sentence in their own words to explain what a conditional statement is and how it is used to help computers make decisions.	Ipads or laptops (one per child)	Algorithm	