

Computing Scheme of Work

Unit 5.2 –

Online Safety



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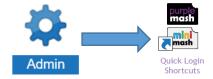
Introduction

For these sessions, the pupils will need to have their own individual logins to Purple Mash.

If you are currently using a single login per class or group and would like to set up individual logins yourself, then please see our guide to doing so at <u>Create and Manage Users</u>. Alternatively, please contact support at support@2simple.com or 0208 203 1781.

Check with the Purple Mash Administrator in your school (usually the coordinator) if you need to change the pupils' passwords. You can create picture passwords for the younger pupils but if you're not sure how to do this just give the 2Simple office a call and we can talk you through it or set them up for you!

Your school administrator can put a shortcut to your school's Purple Mash portal on the devices so there is an icon to use for Purple Mash to save time when the pupils are logging in. The tool to do this can be found in the Admin tab:



Year 5 - Medium-term Plan

Lesson	Aims	Success Criteria
<u>1</u>	 To gain a greater understanding of the impact that sharing digital content can have. To review sources of support when using technology. To review pupils' responsibility to one another in their online behaviour. 	 I think critically about the information that I share online both about myself and others. I know who to tell if I am upset by something that happens online. I can use the SMART rules as a source of guidance when online.
<u>2</u>	 To know how to maintain secure passwords. To understand the advantages, disadvantages, permissions, and purposes of altering an image digitally and the reasons for this. To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. 	 Pupils think critically about what they share online, even when asked by a usually reliable person to share something. Pupils have clear ideas about good passwords. Pupils can see how they can use images and digital technology to create effects not possible without technology. Pupils have experienced how image manipulation could be used to upset them or others even using simple, freely available tools and little specialist knowledge.
<u>3</u>	 To learn about how to reference sources in their work To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information. Ensuring reliability through using different methods of communication 	 Pupils can cite all sources when researching and explain the importance of this. Pupils select keywords and search techniques to find relevant information and increase reliability Pupils show an understanding of the advantages and disadvantages of different forms of communication and when it is appropriate to use each.



Lesson 1

Aims

- To gain a greater understanding of the impact that sharing digital content can have.
- To review sources of support when using technology.
- To review pupils' responsibility to one another in their online behaviour.

Success criteria

- I think critically about the information that I share online both about myself and others.
- I know who to tell if I am upset by something that happens online.
- I can use the SMART rules as a source of guidance when online.

Resources

Unless otherwise stated, all resources can be found on the <u>main unit 5.2 page</u>. From here, click on the icon to set a resource as a 2do for your class. Use the links below to preview the resources; right-click on the link and 'open in new tab' so you do not lose this page.

- <u>Safety recap cards</u>. These consist of 13 words or questions, 13 definitions or answers and often further questions to answer and 6 cards that do not match with anything but have safety implications. Depending upon the size of your class, some pupils might get two cards, or you can keep some cards back to discuss as a class.
- http://www.childnet.com/resources/the-adventures-of-kara-winston-and-the-smart-crew
- Smart Crew 2Connect file. Save a copy of this file in the class folder and enable collaboration by



- <u>SMART rules poster</u> to be displayed in class. You could also download the SMART screensaver and desktop background. These are available in the Teacher Area><u>Online Safety</u> <u>Resources.</u>
- Purple Mash 2Publish Plus <u>Comic Strip</u> to be set as a 2do.
- Purple Mash Display board for the class to share to. <u>A teacher's guide to setting up a Purple</u>
 <u>Mash display board</u> can be found in the Teachers/Guides and Resources section of Purple
 <u>Mash.</u>
- Extension: Set <u>SMART Thinking Writing Frame</u> as a 2Do



Activities

1. If pupils have been following the previous online safety units, they will have encountered many terms relating to online safety. Hand out the recap cards. Then choose one of the options below for matching the cards:

NB If pupils have not completed the previous units, you can use this session as formative assessment to find gaps in pupils' knowledge and you might wish to use some session from other year groups to cover these. In this case spend extra time on steps 1 to 5 of this lesson and do not start the comic strip.

- As a class, try to match these to one another. A child with a word could read it and the child with the matching definition/information could volunteer their answer. If possible, display the cards paired up.
- Pupils move around the classroom to find their matching half by comparing cards and they
 could answer any question posed together or add any information to the topic. If possible,
 display the cards paired up.
- 2. The pupils with the non-matching cards could respond in any number of ways; hopefully, they will 'report' the content to you. Once the matching cards have been discussed, ask the pupils with the non-matching cards to come to the front. If they did report, praise them for this. Why do they think you put such cards in there? It is to give the pupils a model of being aware of the unexpected online and knowing what the right thing to do it when you come across it. You could discuss the safest response to each of these cards in turn.
- 3. In the next part of the lesson, pupils will be watching the SMART CREW videos from the Childnet website. While watching, they should have the collaborative 2Connect file open on their devices and they should add notes to each section. As it is collaborative, every person



Chapter 1: What should you accept?



Chapter 2: What is Reliable?



Chapter 3: What should you keep safe?



Chapter 4: Who should you tell?



Chapter 5: Be careful when meeting up



does not have to note down every point, it will be a shared effort. Each short video clip will contain key online safety messages to discuss and review with the pupils. Alternatively, groups within the class could watch one video on their own devices and contribute to that part of the 2Connect file. Each group could then present their part at the end.

- 4. What are the key messages? How do these messages relate to the pupils and what they do online?
- 5. Do pupils remember the SMART rules. Display the poster as a reminder: they match with the SMART crew video themes.
- 6. Using 2Publish Plus and the blank comic strip, tell the pupils that they are going to create their own short comic strip to tell the story of one of the letters of the SMART and/or give advice on one of the following topics:
 - S Safe
 - M Meet
 - A Accepting
 - R Reliable
 - T Tell
 - The impact that sharing digital content can have on a person→ cyberbullying.
 - What to do when things go badly online? (T Tell example)
 - How to behave as a responsible digital citizen: Responsibility to each other as well as themselves. (S-Safe)
 - Being a critical thinker online (R Reliable), also malware, spam, plagiarism comes into this.

They can use the ideas from the video and apply these to their own character.

- 7. Let the pupils start to plan what they are going to do for their comic strip.
 - What is the online safety message going to be?
 - What characters are the pupils going to create?
 - How many pages are the pupils going to have in the comic? Be realistic and think about the time available to write the comic strip.
 - The pupils need to think about the ages of the pupils reading it (Year 5/6).
- 8. Pupils could continue this as a homework activity if necessary and then share to the displayboard once they are finished.

Extension Activities are shown on the next page.

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Extension Activities:

Open 2CreateAStory and choose the 'My Adventure Story' option. Children should take their comic strip idea and present it as a linear animated tale using sprites to enhance their message. If children open two tabs on their browser, they can have their comic strip open as well as 2CAS, and copy and paste text across from one to other.

It will also be helpful for them to see the images they used in the comic strip and replicate them in their animated tale, and – if appropriate – incorporate sound to enhance their online safety message.

or

Match the situation to a SMART rule in a writing template task (see Resource section for the link).



Lesson 2

Aims

- To know how to maintain secure passwords.
- To understand the advantages, disadvantages, permissions, and purposes of altering an image digitally and the reasons for this.
- To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online.

Success criteria

- Pupils think critically about what they share online, even when asked by a usually reliable person to share something.
- Pupils have clear ideas about good passwords.
- Pupils can see how they can use images and digital technology to create effects not possible without technology.
- Pupils have experienced how image manipulation could be used to upset them or others even using simple, freely available tools and little specialist knowledge.

Resources

- Post it notes: **Note:** Teacher warning; during the first activity today, you will be asking pupils to write down their passwords and then share them **you will stop them before they have shared** but there is a risk that some pupil passwords might need to be reset.
 - A (slightly riskier) idea is to create a 2Write file called 'Password Information' and save it in the class shared folder to use instead of the post-it notes. This is quite likely to result in passwords needing to be reset.
 - If either of these plans is likely to cause too many issues in your school setting, then use the alternative activity suggested within the lesson plan.
- Password quiz set as a 2do
- Pupils will be manipulating photos, so will need access to devices with webcams. Each child will need to take one selfie and save it in an accessible place.
- 2Paint a Picture tool (in Tools>Art and Design) Click here for a user guide



Activities

- 1. Review the displayboard of pupils' comic strips from last session if they have had time to finish them.
- 2. Tell the pupils that you are going to give the pupils some time to review other pupils' comics strips or complete their own, meanwhile, you need to do some computer admin and collect a list of all their passwords. Use one of the following strategies (see note in the resources section above):

Alternative (a) (see note in the resources section)

Give out the post it notes so that each child has one. Ask them to write their login and password on the post it. Ask pupils to pass them to the front of the class <u>BUT stop the pupils</u> <u>before they actually do this.</u> Ask them whether what they are doing is sensible?

Explain that they do need to think critically about what they are asked to do online even if the request comes from a reputable source. They will often find themselves in the position of educating their parents or other adults about this.

Explain that, in case any passwords got seen by others, you will reset their passwords to their birthday month followed by their house number...

Alternative (b) (see note in the resources section)

Open the 2Write file on the whiteboard and tell pupils they need to open the shared file from the class folder and enter their full name, PM login and password. Switch off the display of the screen.

Start the pupils working and remind them about the passwords. After 5/10 minutes. Stop the class and have a look at how many pupils have shared their passwords. Move the 2Write file to your own work folder so that pupils no longer have access to it.

Your next step will depend upon how many pupils have shared their password. The ideal is for no pupils to have shared, in which case, pretend to be cross and ask them why they did not do as you asked? Otherwise, discuss with them whether there is something wrong with what they just did, sharing passwords. Even if you cannot see them up on the whiteboard, the whole class had access to the file so anyone who has shared has shared with the whole class. What if someone were to then use your password to upload inappropriate content; effectively committing identity theft?

Explain that, in case any passwords got seen by others, you will reset their passwords to their birthday month followed by their house number...





Alternative (c) (see note in the resources section)

Tell the class that you have had to reset all the passwords and display a list of names and (incorrect) passwords on the whiteboard. Ask pupils to write down their password then ask them why you have caused them to be open to identity theft?

Explain that they do need to think critically about what they are asked to do online even if the request comes from a reputable source. They will often find themselves in the position of educating their parents or other adults about this.

Explain that you have not really done that, you will not write down their passwords, but you have reset them to their birthday month followed by their house number...

3. Hopefully, they will object to the having their password reset to their birthday month followed by their house number for the same reason. Come up with ideas for how best to distribute passwords. You could explain that most companies now do not have access to passwords, if a user forgets their password, they are sent a link by email to reset it themselves and the password is encrypted when stored on the company databases. What does **encrypt** mean?

Encryption

The translation of data into a secret code. Encryption is the most effective way to achieve data security. To read an encrypted file, you must have access to a secret key or password that enables you to decrypt it. Unencrypted data is called plain text; encrypted data is referred to as cipher text.

From https://www.webopedia.com

- 4. Explain that your password is the first line of defence against identity theft. Explain that you will be requesting a password reset for those pupils who shared private details and emphasise that they are not genuinely in trouble; you were trying to catch them out. However, they do need to think critically about what they are asked to do online even if the request comes from a reputable source. They will often find themselves in the position of educating their parents or other adults about this.
- 5. Ask the class for advice about how to set a good password. Top tips are to use a password of at least 6 characters, use upper and lower case, use a combination of letters and numbers and (where allowed by the system) use special symbols such as \$ or &.
- 6. Ask pupils to try the password quiz.
- 7. Bring the class back together and explain that they are going to do some image editing.
- 8. First, pupils will need to take a selfie and save this on their device, the method will depend upon what they are using as a webcam. For tablets, use the camera app to save the image to the device gallery, for laptops and PCs use the webcam software to take a photo.



9. Next, show the pupils the 2Paint a Picture tools and specifically, the e collage template. Top open this, launch 2PaintaPicture and select eCollage from the front screen. This tool allows you to use images as stamps, to add clipart and recolour images.

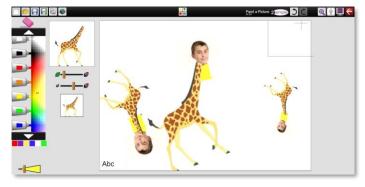


10. Demonstrate the following:

• Uploading their image. To do this, click on the clipart gallery button in the top menu bar. Then click Choose File. They should then locate their photo:



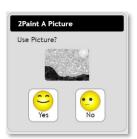
- The stamp image is the bottom square picture box.
- Alter the colour filter on the stamp by selecting a colour and the sliding the top slider to change the level of saturation.
- Alter the stamp size by sliding the bottom slider
- Draw on the image by selecting a colour and using the pen size slider to alter the line width
- Remove parts of the image using the eraser tool (take care with the width)
- Clicking on the main screen will place the stamp.
- Clicking on the screen, holding down the mouse button or finger and moving the mouse/finger, will rotate the image.

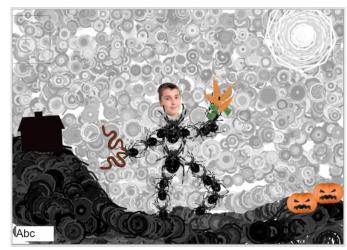


A stamp can be combined with other stamps by selecting additional stamps.



• The ecollage effect can be combined with other templates. For example, create a background using a different 2Paint a Pic template, save this. Then click the 'New file' button and choose the eCollage template. You will then be offered the option to use the first picture:





This can then be stamped upon:

- 11. Pupils should aim to create two images, one that they would be happy to share and one that they would not. You could ask them to imagine how a cyberbully could manipulate their image to embarrass them and try replicating this.
- 12. Once they have their images, ask them to suggest how it would feel showing them to a good friend, someone in the class who knows that they have been doing them in this lesson? You might want to record their feeling words on the board or in a 2Connect file.
- 13. Next, how would they feel if their sibling or family member saw the embarrassing picture?
- 14. How would they feel if someone else from the class was able to get a copy of their good picture (online or printed) and then took it home and claimed they had made it or took it to the headteacher and got praise for a creative piece of work?
- 15. How would they feel if some pupils in the other class saw the embarrassing one?
- 16. What about if they were pupils that you did not get on well with?
- 17. How would you feel if they printed off lots of copies and stuck them all over the school and added their own 'edits' to make the picture even more embarrassing?
- 18. How would this change if they then shared the image with the pupils at a club that you go to? What about sharing it online so that when anyone searches the internet and puts in your name, this image comes up?
- 19. How does it feel to think that this embarrassing image could still come up 10 years from now when someone who is interested in employing you, looks up your name on the Internet?



- 20. Reassure the class that this will not happen, if they are concerned by this conversation, they could open a blank 2Paint a Picture file and then save it as the same name as the picture that they don't like. It will then overwrite that picture.
- 21. Do they think that this discussion will change their behaviour to make them consider what they share?

Extension Activities:

Although it is fun using the erase and stamper tools to modify a selfie, are the children happy to have a photograph of themselves used on a digital system?

What is a better option that using a photograph? If they have used the Computing Scheme in Year1, they may have been taught about the Avatar maker, or discovered it themselves.

Why might creating an Avatar be a safer option that using a photograph (modified or not)?

Why do they think that the Avatar maker in Purple Mash does not have an option to take a selfie and use that?

When might a photograph need to be used online? (Passport image for example)

Note: creating an avatar has not been added as a task within this, as this will be covered later in the Database.



Lesson 3

Aims

- To learn about how to reference sources in their work
- To search the Internet with a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information.
- Ensuring reliability through using different methods of communication

Success criteria

- Pupils can cite all sources when researching and explain the importance of this.
- Pupils select keywords and search techniques to find relevant information and increase reliability
- Pupils show an understanding of the advantages and disadvantages of different forms of communication and when it is appropriate to use each.

Resources

Unless otherwise stated, all resources can be found on the <u>main unit 5.2 page</u>. From here, click on the icon to set a resource as a 2do for your class. Use the links below to preview the resources; right-click on the link and 'open in new tab' so you do not lose this page.

- Plagiarism Quiz
- <u>Citations Slideshow</u>
- Writing Frame <u>Fact Finding Citations</u>. This writing frame requires pupils to research facts using either the Internet or books available in school. You can edit the question by using the
 - teacher edit button to overwrite the questions if you wish. **Set this as a 2do for the class.**
- Note: Pupils will look at Google images because this is a source that they are likely to be using
 for images for homework or leisure. As Google is a site external to Purple Mash, check
 whether any screen buttons or options have moved prior to the lesson and adapt as
 necessary as Google does get changed regularly.

Activities

1. If pupils have been following the previous online safety units, they will have encountered plagiarism in Year 4. See how much they remember by doing the Plagiarism quiz as a class. The quiz is designed so the class is split into teams, teams select a question to try and if they get it

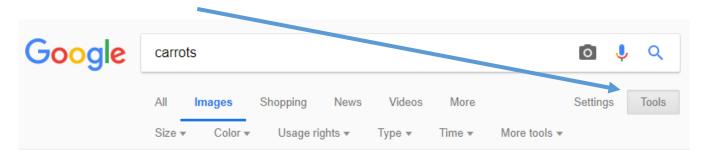
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correct, they select their team colour. Then play passes to the next team. Pupils cannot choose the same question that a team has just failed on as all the answers in this quiz are true/false answers.

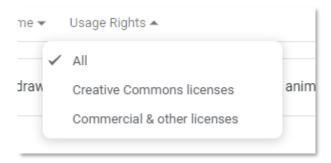
- 2. Review the words **citation**, **reference**, **and bibliography** in relation to giving credit to the original author of a piece of work.
- 3. Discuss the format that references/citations usually take using the presentation https://www.purplemash.com/#app/bloglinks/citations_slideshow (2 slides).
- 4. Ask the class to complete the Citation writing frame that you set as a 2do referencing all their sources correctly.
- 5. Pupils could share their files to a displayboard for class discussion; did all the pupils realise that the Genbu turtle does not exist except in mythology? Did pupils find the original source of the quote 'Always try to be a little kinder than is necessary' (Barrie, J.M., The Little White Bird, Hodder & Stoughton,1902), this line has been quoted in other works of fiction such as Wonder by R J Palacio.
- 6. Ask the pupils what they think they should do if they download images/a video/music from the internet? These should also have a citation in the same way as text. Many images are 'copyrighted' this means that the person who created the original images does not give permission for it to be used in certain ways. In some search engines you can investigate the copyright of images. The following example uses a Google image search for carrots.
- 7. Search Google and select Images as the result. Then click on the button that appears next to the selection of result types



8. A new menu appears, one of the items is possible options. Usage rights . Click on the arrow to display the



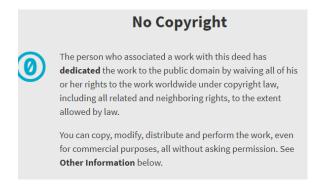
9. These are:

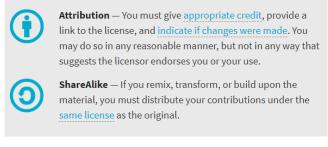


- 10. Creative Commons (CC) is a non-profit organisation who provide free licences for creators to use. If an image has a CC licence, you may usually use the image for non-commercial purposes. You must still give credit to the original creator of the image. If you do not, you could be prosecuted by the creator of the image.
- 11. You could contrast this with 2Simple/Purple Mash. We must use images that we have created ourselves or bought the rights to, or images that are labelled for reuse commercially.
- 12. When you click on an image; (select a Wikimedia commons image as an example), Google displays a larger copy of the image to the right of the screen (device dependent). Here, you should be able to find a reference to the license details:



13. Click on the License details link and explain the information given, does the user need to attribute\give credit to, the creator of the image?





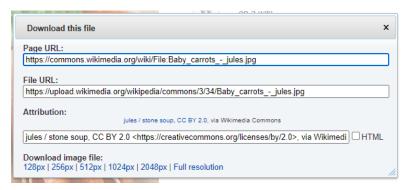


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- 14. Click on another (non-Wikimedia) image and look at the licence details. Are they different? Often you will be required to attribute\credit an image.
- 15. There is a lot of information here, but the main idea is that pupils grasp the idea that they cannot take another person's work and do anything that they like with it.
- 16. How would you attribute an image? The method will depend upon the image. Clicking on the image in Google will often take you to a page where you can copy the attribution or the website address into your work as an image caption. For example, clicking on the Wikimedia image takes you to a page that has a Download button. Clicking this button brings up the attribution information to copy and paste into your work.



- 17. Ask the pupils what the best way of finding out information is? In the context of the current lesson, they will probably say books or the Internet. The rest of the discussion in this lesson branches away to other methods of communication. The methods that your pupils have, or are likely to experience, will depend upon the make-up of your individual class. Pick those areas that cause the most issues within your school situation for discussion. It might be useful to record this using one of the collaborative tools in Purple Mash such as 2Write or 2Connect. Pupils could be the scribes for a collaborative document.
- 18. Branching out to other methods of communication, ask the following:
 - If you wanted a copy of a photo that you know your cousin had a printed version of, what would be the best way to communicate and get this? (post).
 - If he had an electronic version, is there an easier way (email, instant messaging).
 - If you applied for a job in a different country and the company wanted to find out about the applicants without flying them all over, what communication method would they use? (video conferencing, internet search).
 - If you wanted to find out your friend's address (instant message, phone call).
- 19. Can the class make up any rules for deciding upon the best form of communication to accomplish a particular task? Time, cost, and reliability will be factors.

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- 20. Compare speaking face-to-face (or by video link) to instant messaging. Messaging can be easily misinterpreted. Have they ever been negatively impacted by a misunderstood message before?

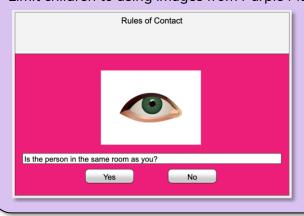
 Do you always need to reply instantly to an instant message, or can it sometimes be useful to stop and think and even 'sleep on it' when dealing with a difficult situation?
- 21. How does it feel if a friend ignores you face-to-face? Does it feel the same when it is on a messaging platform? Try a role play exercise: Person A messages person B to ask to meet up. Person B does not reply straight away. Is Person B being rude?
- 22. Person A sends many messages as they feel they are being ignored and are upset. Person B still does not reply. Person A gets very cross and messages Person B that they are not friends anymore. A couple of hours later, Person B looks at their messages (B was at a class without their phone and could not reply), how would person B feel; remorseful or angry. How could this situation escalate?
- 23. Can pupils add any information on the advantages and disadvantages of the different forms of communication or things to consider?

Extension Activities:

Open 2Question and create a new branching database that provides a template for the best forms of communication that was discussed earlier in the lesson. Focus on communicating with an adult in a range of situations.

How can each question be represented by a clear image (i.e. "Can they be disturbed?" might be represented by an ear with a red cross).

Limit children to using images from Purple Mash search and ask them why this might be.

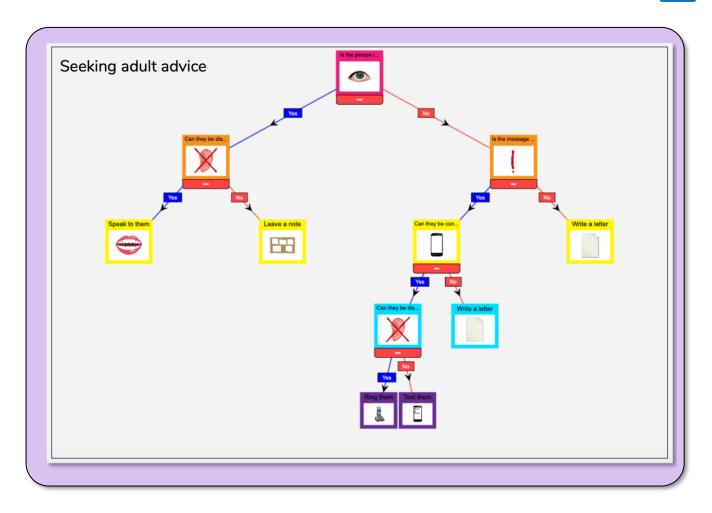






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Assessment Guidance

The unit overview for year 5 contains details of national curricula mapped to the Purple Mash Units. The following information is an exemplar of what a child at an expected level would be able to demonstrate when completing this unit with additional exemplars to demonstrate how this would vary for a child with emerging or exceeding achievements.

	Assessment Guidance
Emerging	Pupils demonstrate a developing understanding of their responsibility to others as well as to themselves when communicating and sharing content online. They know what to do if they are upset by online content and know that there are rules such as the SMART rules to protect them (lesson 1). With support throughout, pupils demonstrate an understanding of what the SMART rules are but may find it difficult to apply all of these to using technology safely and respectfully (Unit 5.1 Lesson 1). They can create a simple comic strip to teach other pupils about online safety (Unit 5.2 Lesson 2).
Expected	Pupils demonstrate an understanding of their responsibility to others as well as to themselves when communicating and sharing content online. Pupils demonstrate a clear understanding of what the SMART rules are and how they should be applied to using technology safely and respectfully (Unit 5.1 Lesson 1). In lesson 1, step 2, pupils demonstrate that they are developing critical thinking skills in their online experience and know what sorts of inappropriate content should be reported. They can apply their knowledge in the creation of a comic strip to teach other pupils about online safety (Unit 5.2 Lesson 2). When doing image editing in lesson 2, they were able to see both the positive and negative consequences of technological developments including altering images both in terms of impact upon themselves and impact upon others. In lesson 3, pupils can explain why citations must be considered when using the work of others. They know that there is a convention for recording citations and can put this into practice in their work. In lesson 3, step 11 onwards, pupils' contributions demonstrate a growing awareness of the context of communication and an ability to view the communication from the intended audience's point-of-view. Most pupils will be able demonstrate that they understand what is meant by reliable and can build on their ability to identify reliable content. In lesson 3 while completing the citation writing frame, they were able to recognise that it is not a good idea to rely upon only 1 source for information, for example, the Pacific Tree Octopus example.
Exceeding	Pupils are developing a deeper understanding of the interaction of the positive benefits and negative risks of innovative technology. They take advantage of these technologies in their work but are mindful of protecting themselves and others from harm.





Assessment Guidance

Pupils demonstrating greater depth have a detailed knowledge of what the SMART rules are and understand how these are applied to using technology safely and respectfully. Furthermore, they understand the implications of improper use of technology and the internet (Unit 5.1 Lesson 1). They can apply their knowledge in the creation of a detailed comic strip to teach other pupils about online safety (Unit 5.2 Lesson 2).

