



Mouse and Keyboard Skills Knowledge Organiser

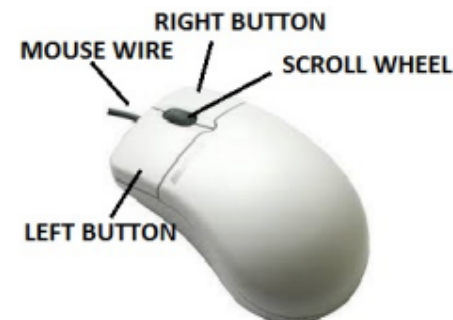


? What are we learning about mouse and keyboard skills?

We can control a computer in different ways, including touching the screen on a device such as an iPad or with a keyboard for typing letters and numbers. A mouse or trackpad is used to select and move objects on the screen. The computer mouse is called a mouse because when it was invented, it looks similar to a mouse with a wire (tail). We need a keyboard to type letters and numbers onto the screen. When typing, try to use as many of your fingers as possible to improve the speed.

Key knowledge

1. Move the mouse or trackpad and left click to select an object.
2. Drag and drop with mouse or trackpad to move objects around the screen.
3. Find letters or numbers on a keyboard.
4. Begin touch typing with home row keys.



Important Vocabulary

Mouse	A mouse is used to select objects and move them around on the screen. Move it around on the desk to control the cursor and click buttons to select objects.
Trackpad	On a laptop, the trackpad is a touch area below the keyboard that controls the cursor on the screen.
Cursor	An arrow on the screen that is controlled by a mouse or trackpad.
Left button	The left button on a mouse or trackpad is used to select objects or hold it down to move objects around (click and drag).
Scroll wheel	On some computer mice there is a wheel between the buttons that is used to move up and down the page quickly.
Home row	The middle row of letters on a keyboard and where you position your fingers to start typing (pointing fingers on the F and the J)



Early Digital Art Knowledge Organiser

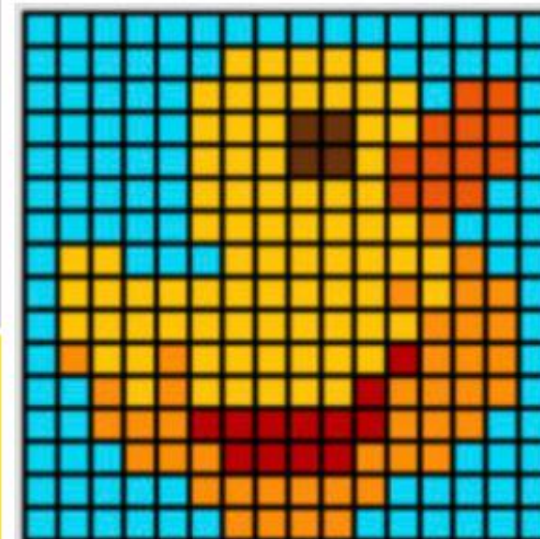


? What are we learning about digital skills?

Art often needs lots of equipment; paper, pencils, colour, paints, rubbers, rulers etc. Creating art on a computer means we can use lots of tools all on one device. Using a computer also makes some tasks quicker. For example, filling a square a colour on a computer is much quicker than painting it with a real paint brush. We can also change the colour quickly if we make a mistake or change our mind.

Key knowledge

1. Change the colour of individual pixels to accurately re-create basic artwork.
2. Make changes where required.
3. Change the colour of individual pixels to accurately re-create detailed artwork.
4. Use zoom controls to help fill small shapes.



Important Vocabulary

 Pixels	A computer display, television or any sort of digital screen is made up of small squares called pixels. Each pixel will have a light that changes colour. The smaller the pixels the better the picture will be. You can see the pixels on the duck picture above, each one has its own colour.
Grid	A grid is lots of pixels made into a square or rectangle. There are rows of pixels and when you copy a pixel picture, it is easier to copy one row at a time, starting at the top or bottom.
 Fill	Each pixel can have its own colour and you can use the tools in the software to choose a colour, then click or tap the pixel to change the colour.
 Check	When you copy a picture like the duck above, make sure you check that the pixels are the correct colour. For example, you could count how many pixels are one colour in a row to match the picture.
 Zoom	Get closer to the page to help add more details or make is easier to fill small shapes.



Early Digital Musical Creation Knowledge Organiser



? What are we learning about digital music creation?

A lot of music is now created using a computer so it is important to understand how this is done and why musicians use computers sometimes instead of really instruments (computers can make it quicker to make music and use lots of different sounds).

Key knowledge

1. Understand that different instrument make their own sound and that instruments can be divided into groups.
2. Create a rhythm using a pattern of beats.
3. Create digital sounds using patterns and shapes.
4. Create a simple melody using patterns and adjust tempo.



Important Vocabulary

	Rhythm	This is the beat of the music and sets how quick or fast the music is played. The drums are the usual instrument to control the rhythm.
	Melody	A sequence of notes played to make a tune. The singer usually sings the melody.
	Tempo	The speed of the music (tempo) can be changed to make it quicker or slower.



Key Stage 1 E-safety Knowledge Organiser



? What are we learning about e-safety?

The internet can be amazing, helping us learn, play games and speak to other people. We need to make sure we are safe from people upsetting us and also understanding the dangers of sharing our personal information, such as our address, online.

Key knowledge

1. Understand what personal information is and why we keep personal information private.
2. Understand why websites want personal information.
3. Identify when and where to go for help when concerned.
4. Understand the dangers of sharing photos online?
5. Understand that people online are not always who they say they are.
6. Understand how to trust information online.
7. Learn to use the Internet responsibly.
8. Understand why we should be respectful.



Important Vocabulary

 Personal information	This is information about us, including our name, address, telephone number or passwords. We need to make sure that we <u>do not</u> put this information on the internet for people we do not know to see as we would not do this in the real world. For example, if we are playing an online game then do not use your real name, use something else.
 Sharing	The internet allows us to post photos and videos online for others to see, this is called sharing. We do not want people we don't know to see personal photos of videos of us or our friends and family so we have to check with a grown up we trust before sharing them online. We would not give a photo of ourselves to a stranger in the real world so we do not do it online either.
 Permission	If we have taken a photo of video of someone else then we need to ask their permission before posting it online as they may not want others to see it.
 Report	If we see something online that upsets us or we think is wrong then we need to tell an adult we trust, such as a parent or teacher.
 Trust	Not everything that we see on the internet is correct and should be trusted. Always check the information with other websites or an adult we trust. People online can also pretend to be someone else so we need to be careful who we are talking to and only speak to people we know in the real world.
 Respect	When we are talking to people online then we need to make sure we being kind and respectful, treating people as we would want to be treated ourselves. If someone is not being kind then speak to an adult you trust.



Text and Images Knowledge Organiser



? What are we learning about text and images?

Magazines, websites, newspapers, posters etc are now all made on a computer. Each includes text (words and numbers) and images (pictures) that have been placed onto the page to make it look as interesting as possible. We can add text and images to a page on a computer then use other tools to change the appearance (size, colours), to make the page look how we want it to.

Key knowledge

1. Add, move and resize images. Add text and adjust size and placement.
2. Add, resize and place images on a page then add and position text to label and describe images.
3. Use word banks to write sentences about images.

	Click this icon, choose a colour and then click the page to fill it the colour.		Use this icon to add text (letters or numbers), then type your own words. Drag the text box around the position it.
	Use this icon to add a sticker (a picture of a person etc).		Use these icons to change the size of the text.
	Drag the corners of the object to make it bigger or smaller.		Use this icon to change the colour
	Use this icon to delete an object you have added. Select it and then click delete.		A wordbank is a list of words about one thing, which we can use to make sentences.
	If you make a mistake, use this undo icon to go back a step.		



Digital Comic Creation Knowledge Organiser



? What are we learning about with digital comic creation?

You may have read comics in magazines, they are a fun way to tell a story. We can use a computer to make our own comics using background pictures, characters, text and stickers. Making comics on computers can be quicker than making a comic on paper because all the tools and pictures are already made.



National Curriculum Content

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.



Key knowledge

- Know the advantages of creating comics digitally (e.g speed of production)
- Know the different aspects of a comic; scenes, backgrounds, characters, narration, speech bubbles and stickers.
- Know how to add, resize and organise colour or picture backgrounds.
- Know how to add, resize, organise characters/objects to different panels.
- Know how to add narration using text and direct speech using speech bubbles.



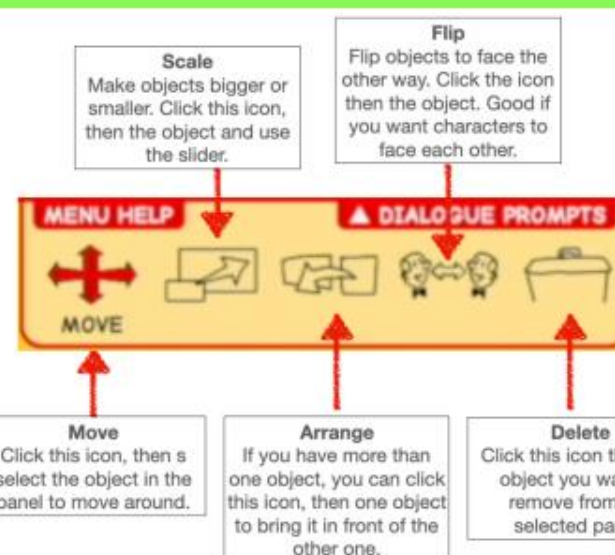
Important Vocabulary

Panel	A comic is divided into panels, which are the scenes of the story.
Narration	Tells the story in words.
Stickers	These can be added to the panels to show effects, such as a bang or visual sound effect.
Scale	Change the size of an object.
Arrange	Put the objects in front or behind each other (e.g a character in front of background)
Flip	Turn an object, such as a character, to face the other way.



Quick tips

- Plan!! Once you understand how the tools work then plan a story so that your comic makes sense.
- To use the tools below, first select the panel you are editing then select the tool and then choose the object you want to edit.





Key Stage 1 Programming Knowledge Organiser



? What are we learning about early programming?

When we use computers and digital devices, such as a mobile phone television, or even a calculator washing machine or microwave, there is a sequence of instructions that the device has to follow to make it work. This is called a program when you press a key on the keyboard and the letter or number appears on the screen, the computer has followed a program of instructions in order to write a computer. We can learn to program objects with computers inside, such as robots, traffic lights and on-screen characters.

Key knowledge

1. Place instructions into the correct order (sequence) to make something work.
2. Use direction arrows to move an on-screen object (character/sprite) to achieve an objective.
3. Predict a route and sequence direction commands (algorithm) to achieve an objective. Correct the errors if necessary (debug).
4. Sequence code blocks, including movements and execute (start program) blocks to write a program to achieve an objective.

Important Vocabulary

Sequence	Place instructions one after the other in the correct order, such as the sequence of lights on a traffic light.
Algorithm	Place a sequence of instructions in the correct order to make something work, such as programming a washing machine.
Predict	Work out what will happen before we try it. For example, thing about the directions a robot need to get to a target before we run the program.
Execute	Run the program to see if it works.
Debug	If the program does not work, can we find the error and correct it.

Programming



Fun Fact

The first computer “bug” was found in 1945 as a moth in the system. This is why it is called ‘debug’.