ICT– Creating media- Digital photography | Class 2

Previous knowledge

How to make marks on a screen	To identify different paint tools	To compare computer and painting papers	To save my work	To open my work from My work folder.

Key Vocabulary

image	A picture taken by a digital device.	landscape	An image which is wider than it is high.	portrait	An image which is higher than it is wide.
field of view	All the things that the viewer can see when they look at the image.	framing	Positioning an image in the viewfinder of a camera	subject	The focus of the image

Key knowledge

Images can be altered. The colours can be changed.	Photos may be blurred if you move when taking it or there is not enough light.	Images can be saved and downloaded.	Photographs we see online may not be real
Different devices can be used to take photographs.	To take a photograph, I hold, look and press.	A photograph can be taken in either portrait or landscape.	Light affects photographs

Next steps

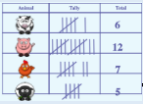| Recognising pictograms	Interpreting tally and block charts	Recognising attributes	Asking questions about data	Answering questions about data

ICT– Data and information- Pictograms · Class 2

Previous knowledge

| How to collect simple data. | How to describe the properties of an object. | How to group objects which are similar. | How to describe the common features of my group. | How to present my information. |

Key Vocabulary

data	information	pictogram	A chart which uses pictures to display data	block diagram	A chart which uses blocks to display data.
tally count	A chart which uses tallying to display data.	attribute	A feature of an object or person.	tally	A quick way of counting using groups of 5.

Key knowledge

Tally charts can represent data and allow us to find totals and differences.	Pictograms can be made on a computer using simple commands.	Computers help us present data collected in one way in another form.	Objects can be sorted using their attributes(features). Then the objects can be compared more efficiently.
People can be described by attributes. This can be represented in a pictogram.	Computer programs can present the same information in different ways.	My data is my property.	I can give examples of data which I can share and information which it is not safe to share.

Next steps

| To know what information to share safely. | To interpret information accurately. | To present my information effectively. | To use tallying in my counting. | To ask and answer questions about information presented in different ways. |

ICT– Programming- Programming A Robot Algorithms — Year 2

Previous knowledge

To know what information to share safely.	To interpret information accurately.	To present my information effectively.	To use tallying in my counting.	To ask and answer questions about information presented in different ways.

Key Vocabulary

Command	An instruction to the computer or robot.	**Algorithm**	⬆⬅⬆➡ **A precise set of instructions for a computer to follow which can be turned into code.**	**Debugging**	Fixing the bits of a program which don't work.
Bug	A bug is a mistake in a program which means it does not do what you expect it to.	**Program**	A sequence of commands that can be run by a computer to complete a task.	**Sequence**	**A set of instructions in a particular order.**

Key knowledge

A robot has a computer inside it.	**A sequence is a set of commands in a particular order.**	If the order of the instructions is changed, then the robot will move in a different way.	**Before the robot will move, it is important to clear its memory.**
The robot moves along a path called a route.	**A bug is a mistake in a program** which means it does not do what you expect it to.	Fixing a program is called debugging. Debugging makes a program better.	Programmers break their work into small sections to make it easier to debug.

Next steps

To identify the start and finish of a sequence.	To predict what outcome a sequence of commands will have.	To build sequences using a variety of blocks.	To choose a sprite and a background.	To debug my sequence effectively.

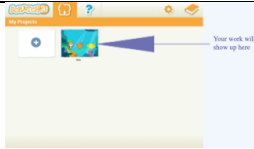# ICT– Programming- Programming B   An introduction to quizzes   Class 2

Previous knowledge

To know what information to share safely.	To interpret information accurately.	To present my information effectively.	To use tallying in my counting.	To ask and answer questions about information presented in different ways.

Key Vocabulary

animation	A type of film made from lots of images joined together so it looks like they are moving.	Algorithm	↑ ← ↑ → A precise set of instructions for a computer to follow which can be turned into code.	Debugging	Fixing the bits of a program which don't work.
Sprite	An image on the computer screen.	quiz	A game where questions are asked and answered.	Sequence	A set of instructions in a particular order.

Key knowledge

Programs in ScratchJr run in a sequence from left to right.	Programs start with an event. The green flag is not the only way to start a program in ScratchJr	When you do something, there is an outcome. By changing the blocks in my program, I can change the outcome.	I can predict what a code snippet does.
I can move a sprite up, down, left and right. I can change its size and make it speak.	To save a quiz I name it and press the blue tick. The house icon helps me check that I have saved my work properly.	I can find my saved project on My projects page.	Sound can be added using the green blocks. Sounds can be added using the pop button or recorded using the microphone.

Next steps

What IT is used at school.	How IT helps us.	What a barcode looks like.	How barcodes work.	How to stay safe online.

ICT– Computing Systems and networks | Year 2

Previous knowledge

A keyboard is used to enter letters and numbers	A computer has a screen, keyboard, base unit and mouse/ trackpad.	A laptop doesn't have a base unit, so it is easier to carry around.	The mouse moves the pointer around the screen. You can draw a picture with the mouse.	The mouse gives information to the computer when it is moved or clicked.

Key Vocabulary

computer	An electronic machine which can work with information. The information can be numbers, words, pictures, video or sounds.	barcode	A number code which a computer can read.
IT	A computer or something that is made to work with computers.	scanner	A device which can read a barcode and convert it into digital information.

Key Knowledge

Computers are part of I.T.	We use I.T to communicate, to learn, for fun and to do simple jobs and tasks for us.	I.T is used in many different places like shops, schools and cars.	Barcodes are labels made up of numbers and spaces which contain information.	Scanners can read barcodes and use the information.
In shops, scanners read barcodes and till add up how much people have spent.	If I am using IT, I must follow the rules to keep me safe.	You should ask someone before you share their picture on the internet.	The Digital 5 a Day helps us use IT safely.	Digital 5 a Day – connect, be active, get creative, give to others, be mindful.

Next steps

Input devices include keyboards, mouse, microphones, button on a pedestrian crossing	Output devices include speakers, monitors, printers, traffic lights.	Computers can be connected together to make a network.	A computer can send information to another computer on the network using a network switch.	Many networks contain a server which is an important computer that stores files and manages the network

ICT– Making Music   Year 2

Previous knowledge

Where IT is used.	How to be safe online.	What an algorithm is	How to move a robot.	What a scanner does.

Key Vocabulary

rhythm	A pattern of long and short sounds	**sequence**	**A set of steps in a particular order.**	**tempo**	**The speed at which music is played.**
pulse	Is a steady beat like the ticking of a clock or your heartbeat.	**music**	**A sequence of notes.**	**notes**	A sign which represents the length and pitch of a musical sound

Key knowledge

Music makes us feel different emotions.	Chrome music lab is a programme which helps us make rhythms on a computer.	**A sequence of notes on the computer will create a rhythm.**	The tempo and the pitch of the notes can be changed.
Different instruments make different sounds in real life and on the computer.	A sequence of notes can be made to match the movement of an animal.	**A sequence of notes can be edited using the undo button. The impact of music can be improved by editing.**	Music can be saved and reopened.

Next steps

Creating a database	Editing text for impact	Using branching databases	Editing templates	Improving the impact of text.