KS1 Year A

Some children will already know:

Unit 1.1 On-line safety

- Safe logins
- Concept of privacy
- Concept of ownership
- The need to logout

Unit 1.6 Technology Outside School

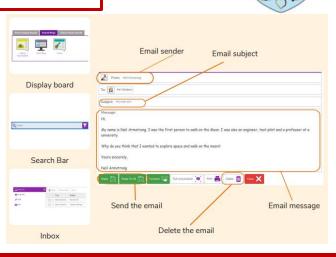
 Developing ideas about the concept of technology that we are surrounded by and its purpose

On-line safety Unit 2.2 2022/23

Key Learning

- To know how to refine searches using the Search tool.
- To use digital technology to share work on Purple Mash to communicate and connect with others locally.
 To have some knowledge and understanding about sharing more
- globally on the Internet.
- To introduce Email as a communication tool using 2Respond simulations.
- To understand how we should talk to others in an online situation.
- To open and send simple online communications in the form of email.
 To understand that information put online leaves a digital footprint or trail.

• To identify the steps that can be taken to keep personal data and hardware secure.



Key Images

Key Questions

Why is a search bar useful?

The search bar on Purple Mash or on a website helps the user to quickly find the resources they are looking for.

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What is an email?

An email is a way of sending messages electronically from one device to another. An email can have items such as pictures and videos attached to it.

What is meant by my Digital Footprint?

A digital footprint is a term used to describe the traces of yourself that you leave online. With every website you visit, you leave a trail or footprint showing that you've been there.

What do I already know? All children will know Unit 1.4 Lego Builders • Algorithms • Logical decision making • Sequencing instructions • Following instructions	Coding Unit 1.7 2022/23			Key Images Rooted in love and growing together to become lifelong lear			
	Key Learning • To understand w are and predict w when they are fol	hat might happen lowed.			?	Hint	
Unit 1.5 Maze Explorers • Coding a 'turtle'	 To use code to n program. To understand w 	·	Open, close or s a file	share Save your work	Watch the instruction video	Get a hint when you are stuck in 2Code	
 Creating programs using sequencing and repeat. Visual use of the Logo programming language. Program logic and structure 	actions are. • To understand w • To use an event		💓 Design	Exit Design		when clicked	
	object. • To begin to unde executes when a p	program is run.	Open design m in 2Code	node Switch to code mode in 2Code	The background object	A 'when clicked' code block	
	 To understand ward objects are. To plan and make 	5	Key O	uestions	right	e sound	
	program.		Key Q	uesmons	An object property	Sound output block	

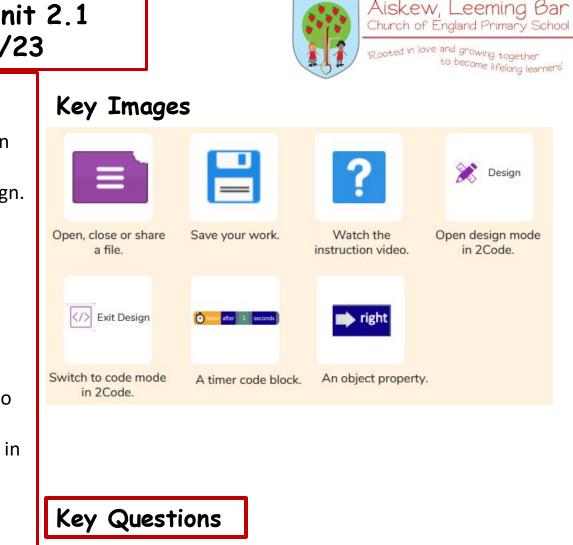
What is coding? Writing instructions in a way that a computer can interpret them to make a program.

Why is it useful to design before coding? It helps you to get a clear idea of what you want your program to do. You can use the design to decide which objects you need to add, what to call them and what actions they should perform.

How can you make characters move in a 2Code program? In design mode, add a character. Change properties such as the name and scale. Exit from design mode and drag your character's code block into the coding window. From the properties menu, select right, left, up or down.

What do I already know? All children will know		Coding Unit 2022/23			Church of	V, Leemii England Prim ve and growing to to become life
Unit 1.7 Coding • Introducing block coding	Key Learning • To understand what	at an algorithm is.	Key Ima	iges		
 Objects and actions Events (Click event, sound output) Executing a program Design view: Planning 	algorithm.	ter program using an m using a given design. collision detection			?	💓 Des
Unit 1.4 Lego Builders • Algorithms • Logical decision making • Sequencing instructions • Following instructions	 To understand the event. To understand the follow a sequence. To design an algori timed sequence. To understand that 	nd that algorithms thm that follows a	Open, close or sha a file.		Watch the instruction video.	Open design in 2Code
Unit 1.5 Maze Explorers Coding a 'turtle' 	have different prope	•	Switch to code mo in 2Code.	ode A timer code block.	An object property	9
 Creating programs using sequencing and repeat Visual use of the Logo programming language Program logic and structure 	in code.	function of buttons in	Key Que	estions		
What is an algorithm? Why is it us	eful in coding? An algor		et of instruction		a problem or ac	hieve c

objective. A clear algorithm can help you to create code that does what it is supposed to do. Why is it important to know there are different object types? Different object types can do different actions. For example, in 2Code, an animal object can do actions such as up, down and stop. A turtle goes forward, backward, pen down and pen up. If you are good at coding, you don't need to debug. Is this true? All coders need to debug to make sure that their program works correctly, and the code does what they intended. As you get better at coding, your programs will get more complex and debugging gets even more important.



All children will know

Unit 1.7 Coding

•Concept of computers following given instructions

Planning using an algorithm design

Key Learning

• To compare the effects of adhering strictly to instructions to completing tasks without complete instructions.

• To follow and create simple instructions on the computer.

• To consider how the order of instructions affects the result

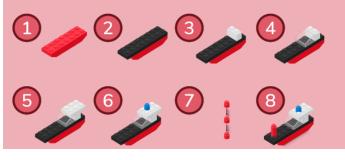
Key Images





Paint Projects

Algorithm A precise, step-by-step set of instructions used to solve a problem or achieve an objective.





Key Questions

Lego Builders Unit 1.4

2022/23

What is an instruction?

An instruction takes you through something step by step so that you can successfully complete a task.

Why do we need to debug code?

When you write code, it won't always work correctly first time. When you search for the errors and correct them, this is known as debugging.

Key Learning

•To understand the terminology associated with searching. • To gain a better understanding of searching on the Internet.

• To create a leaflet to help someone search for information on the Internet.

What do I already know?

All children will know

Unit 1.1 On-line safety • Safe logins Using Purple Mash search functionality

Unit 1.6 Technology Outside School

 Developing ideas about the concept of technology that we are surrounded by and its purpose

Unit 2.2 Online-Safety

- Sharing to a display board
- Sharing online
- Digital footprint

Key Images



Effective Searching Unit 2.5 2022/23



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Key Questions

How can I search the Internet?

The easiest way to search the Internet is using a search engine. The search engine crawls the Internet looking for answers to the search enquiry. Google is a popular search engine.



Children will have an understanding of Early Years Purple Mash computing skills for Safety and Privacy

• I can explain how my work on the computer belongs to me and other people's work belongs to them.

• I can explain what it means for something to be private.

• I can talk about how my body feels when I am not comfortable with something.

• I know who can help me when I am feeling worried.

• I can show that I understand how to be kind to others.

• I can choose activities in my free time that help me to be healthy.

Key Learning

- To sort items using a range of criteria.
- To sort items on the computer using the 'Grouping' activities in Purple Mash.

Key Images





Grouping and Sorting Unit 1.2 2022/23



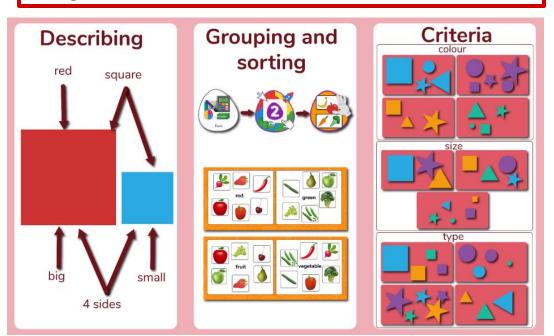
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Key Questions

In what ways can we sort objects?

We can sort objects by different criteria. These include the size of the objects, the colour of the objects or the number of sides the object has. The criteria will depend on the type of objects being sorted.

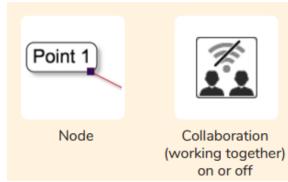


Unit 1.6 Animated Story Books

- Creating text and the use of illustrations
- Genre: animated picture book

Unit 2.6 Creating pictures

Presenting ideas in art form
2Paint a Picture: art effects, collage effects



Key Learning

- To explore how a story can be presented in different ways.
- To make a quiz about a story or class topic.
- To make a fact file on a non-fiction topic.
- To make a presentation to the class.

Key Images

Choose a quiz

question on 2Quiz



Open, close and share a file 2Co

Create a new 2Connect document



Play the quiz

Presenting ideas Unit 2.8 2022/23



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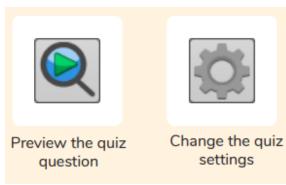
Key Questions

What do we need to think about when planning a presentation?

The important thing to consider is the audience. Think about how old they are and what they would find interesting. For younger children, a presentation with pictures may be more appropriate.

Why should I plan out my presentation?

Planning out your presentation allows you to make sure you have included all the information you need to. It is easier to do this in the planning phase rather than when you have started the presentation.



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• I can show that I understand how to be kind to others.

• I can choose activities in my free time that help me to be healthy.

On-line safety Unit 1.1 2022/23

Key Learning

To log in safely.

• To learn how to find saved work in the Online Work area and find teacher comments.

• To learn how to search Purple Mash to find resources.

• To become familiar with the icons and types of resources available in the Topics section.

 To start to add pictures and text to work.

• To explore the Tools and Games section of Purple Mash.

• To learn how to open, save and print.

 To understand the importance of logging out.

Key Images





Key Questions

What is a password and why should we keep them safe?

A password is a secret word or phrase that allows a user to access a website. Passwords are like toothbrushes in that they should not be shared with anyone else.

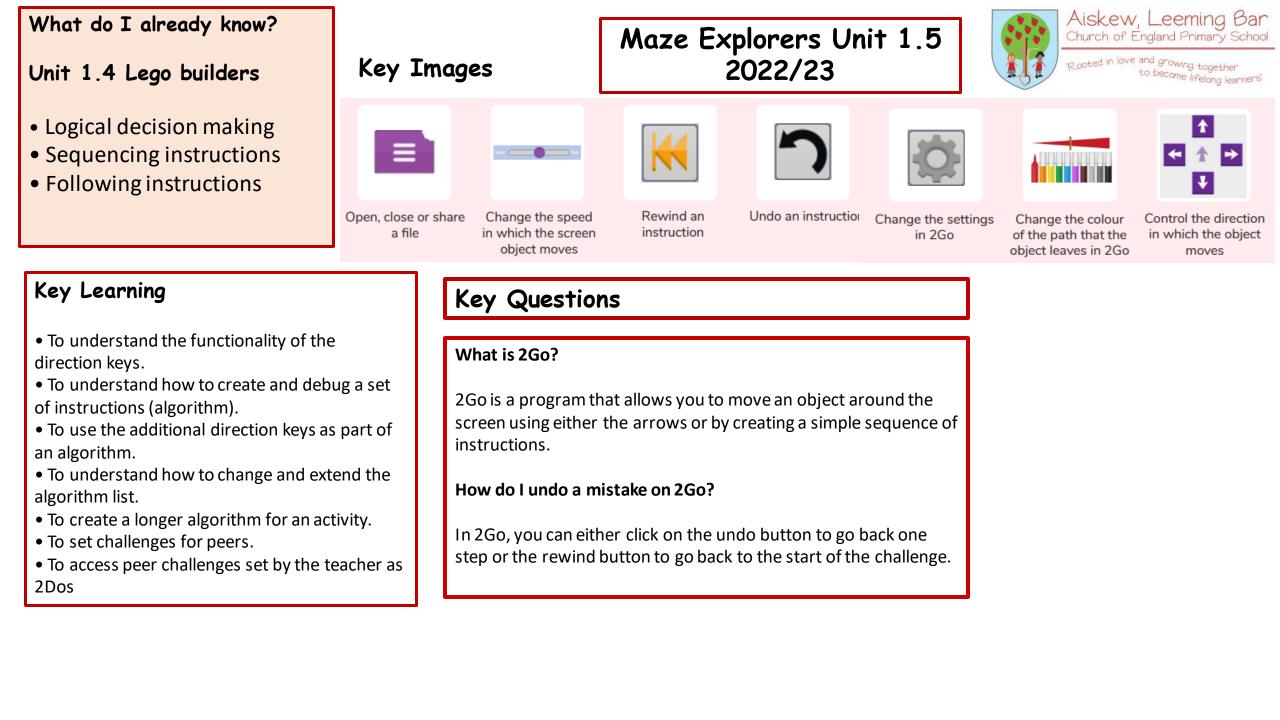
What is a digital avatar?

In Purple Mash, an avatar is a picture you create in the software to represent you. It is safer to use an avatar on the Internet than have a picture of yourself.

Where is my work stored on Purple Mash?

In Purple Mash, most of the work you save will be saved in the My Work section of Purple Mash. The only person that can see this work is the teacher and you.





Unit 1.6 Animated Story Books

• Adding simple sound effects to stories in 2Create a Story

Aiskew, Leeming Bar Making Music Unit 2.7 Church of England Primary School Key Images Rooted in love and growing together 2022/23 to become lifelong learners' 32 Accedic galar Dels and Dames Dr Change the number Loop or unloop the Open, save and Play the composed Delete the music Changes the beats Increase or decrease Choose the digital share a piece of your of quavers in the piece of music tune per minute in the the volume of an instrument to use music music music instrument

Key Learning

- To make music digitally using 2Sequence.
- To explore, edit and combine sounds using 2Sequence.
- To edit and refine composed music.
- To think about how music can be used to express feelings and create tunes which depict feelings.
- To upload a sound from a bank of sounds into the Sounds section.
- To record and upload environmental sounds into Purple Mash.
- To use these sounds to create tunes in 2Sequence.

Key Questions

What is meant by digital music?

Digital music is made using a computer or other device. Digital music allows the computer to copy the sound made by instruments and combine them together to make a piece of music.

How can I change how my music sounds?

You can change how your digital music sounds in many ways. One way is to increase the tempo of the music or vary the volume of each instrument in the piece.

What is it meant by the tempo of the music?

Tempo is measured in BPM, or beats per minute. One beat every second is 60 BPM.

KS1 Year B

Children will have an understanding of Early Years Purple Mash computing skills for Safety and Privacy

• I can explain how my work on the computer belongs to me and other people's work belongs to them.

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• I can choose activities in my free time that help me to be healthy.

On-line safety Unit 1.1 2023/24

Key Learning

To log in safely.

• To learn how to find saved work in the Online Work area and find teacher comments.

• To learn how to search Purple Mash to find resources.

• To become familiar with the icons and types of resources available in the Topics section.

 To start to add pictures and text to work.

• To explore the Tools and Games section of Purple Mash.

• To learn how to open, save and print.

 To understand the importance of logging out.

Key Images



Key Questions

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What do I already know? All children will know Unit 1.4 Lego Builders • Algorithms • Logical decision making • Sequencing instructions • Following instructions	Coding Unit 1.7 2023/24			Key Images Rooted in love and growing to to become life		
	Key Learning • To understand ware and predict was when they are fol	hat might happen lowed.			?	Hint
Unit 1.5 Maze Explorers • Coding a 'turtle'	 To use code to n program. To understand w 	·	Open, close or s a file	share Save your work	Watch the instruction video	Get a hint when you are stuck in 2Code
 Creating programs using sequencing and repeat. Visual use of the Logo programming language. Program logic and structure 	actions are. • To understand w • To use an event		💓 Desigi	Exit Design		when clicked
	object. • To begin to unde executes when a p	program is run.	Open design m in 2Code	node Switch to code mode in 2Code	The background object	A 'when clicked' code block
	 To understand ward objects are. To plan and make 	5	Kay O	uestions	right	sound
	program.		Key Q	uestions	An object property	Sound output block

What is coding? Writing instructions in a way that a computer can interpret them to make a program.

Why is it useful to design before coding? It helps you to get a clear idea of what you want your program to do. You can use the design to decide which objects you need to add, what to call them and what actions they should perform.

How can you make characters move in a 2Code program? In design mode, add a character. Change properties such as the name and scale. Exit from design mode and drag your character's code block into the coding window. From the properties menu, select right, left, up or down.

All children will know		Coding Unit 2023/24			Church of	V, Leeming Bar England Primary Schoo ^{re and} growing together ^{to become} lifelong learners
 Introducing block coding Objects and actions Events (Click event, sound output) • Executing a program Design view: Planning The sequencing instructions Following instructions Following instructions Coding a 'turtle' Creating programs using sequencing and repeat Visual use of the Logo programming language Program logic and structure 	gorithm. To create a program To understand the openation of understand the openation of the sequence. To design an algorit ned sequence. To understand that we different proper To understand what code.	er program using an n using a given design. collision detection nd that algorithms thm that follows a different objects rties. t different events do function of buttons in	Key Ima Open, close or sha a file. Copen, close or sha a file. Switch to code ma in 2Code.	are Save your work.	Watch the instruction video.	Design Open design mode in 2Code.

ve an objective. A clear algorithm can help you to create code that does what it is supposed to do.

Why is it important to know there are different object types? Different object types can do different actions. For example, in 2Code, an animal object can do actions such as up, down and stop. A turtle goes forward, backward, pen down and pen up.

If you are good at coding, you don't need to debug. Is this true? All coders need to debug to make sure that their program works correctly, and the code does what they intended. As you get better at coding, your programs will get more complex and debugging gets even more important.

All children will know Unit 1.1 Exploring purple Mash

• General use of Purple Mash

• Design: avatar creation

• Paint Projects: use of the simple paint tools

Unit 1.6 Animated Stories

• 2Create a Story: Painting tool.

• Animating images using built in effects

 Concept of background (static) and foreground (can move) Animation

Key Questions

Key Learning

 To learn the functions of the 2Paint a Picture tool.

• To learn about and recreate the Impressionist style of art (Monet, Degas, Renoir).

• To recreate Pointillist art and look at the work of pointillist artists such as Seurat.

• To learn about the work of Piet Mondrian and recreate the style using the lines template.

• To learn about the work of William Morris and recreate the style using the patterns template.

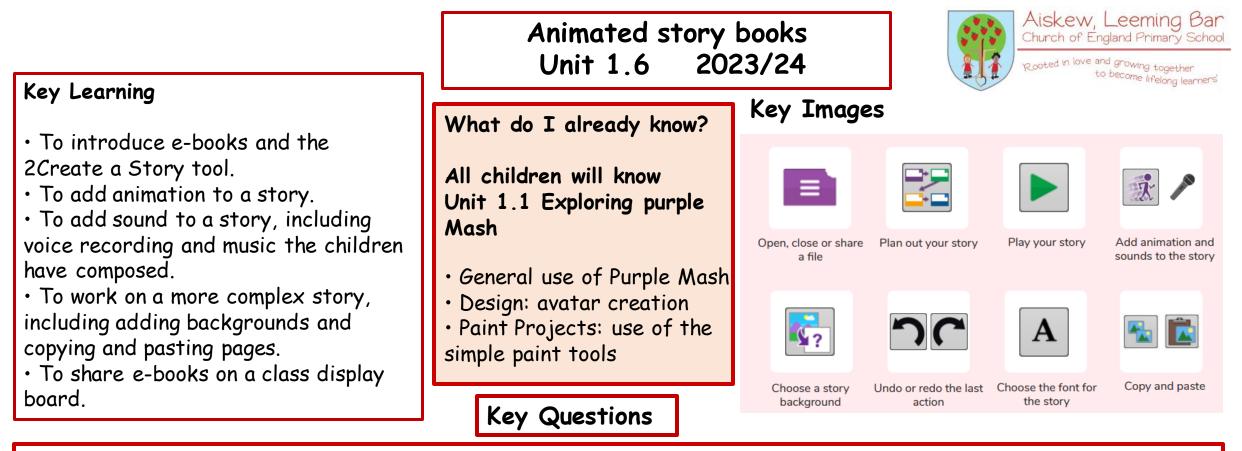
• To explore surrealism and eCollage.

Creating pictures Unit 2.6 2023/24 Aiskew, Leeming Bar Church of England Primary School Rooted in love and growing together to become lifelong learners' Key Images 11.12日時日日 11.12日日日日 11.12日日日日 Choose the style you Open, Save and Undo and redo Choose a want to paint in Share your picture background for your picture P Fill tool and pen Zoom in and Zoom Outline options Eraser and colour thickness palettes out

What are the main features of Impressionism? Impressionism is a style of painting that focuses on the effects of light and atmosphere on colours and forms. Impressionist artists often used broken brush strokes.

What are the main features of Pointillism? Pointillism is a painting technique developed by the artist George Seurat. It involves using small, painted dots to create areas of colour that together form a pattern or picture.

What are the main features of Surrealism? Surrealistic art is characterized by dream-like visuals, the use of symbolism and collage images. Several prominent artists came from this movement, including Renee Magritte, Salvador Dali, and Max Ernst.



What is 2Create a Story?

With 2Create a Story, you can create e-books including animated pages, sounds, narration and music.

What is an animated story?

An animated story is a story where the images in the foreground can move in a variety of ways.

How can I make my story better?

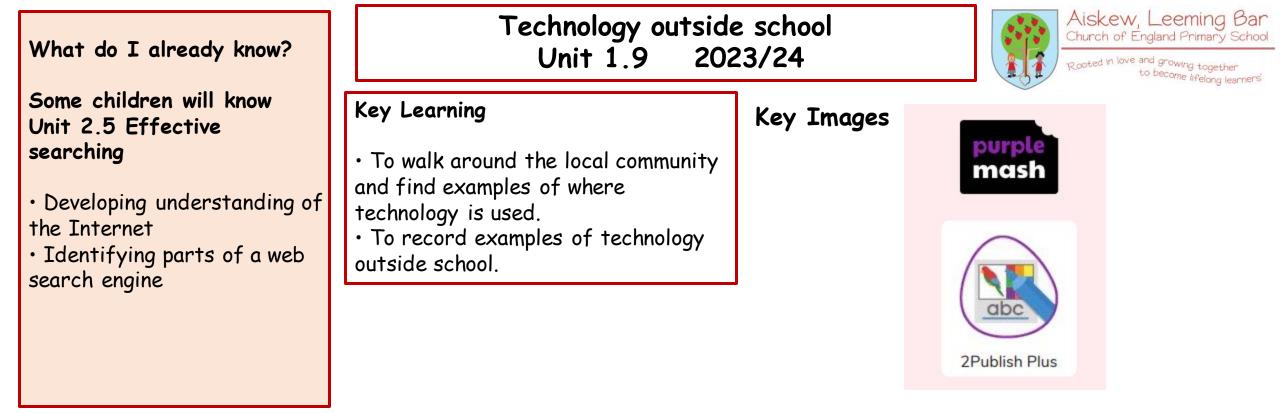
As well as adding animation to the story, it can be improved by adding sounds or sound effects to the different pages.

What do I already know? All children will know	Questioning Unit 2.4 2023/24			Aiskew, Leeming Bar Church of England Primary School Rooted in love and growing together to become lifelong learners'		
 Unit 1.2 Grouping and sorting Sorting data according to criteria All children will know Unit 1.3 Pictograms Collecting and presenting data in a picture format Some children will know Unit 2.3 Spreadsheets Use of 2Calculate to collect data and produce a graph 	 Key Learning To learn about data handling tools that can give more information than pictograms. To use yes/no questions to separate information. To construct a binary tree to identify items. To use 2Question (a binary tree database) to answer questions. To use a database to answer more complex search questions. To use the Search tool to find 	Key Images Open, close or share information Title Give a name to the binary tree	 the second second	Add or delete columns in a pictogram	Prompt Click to Edit +	
Key Questions	information.					

How does a Pictogram show information? On a pictogram, data is represented by pictures. Pictograms are set out in the same way as bar charts, but instead of bars they use columns of pictures to show the numbers involved.

How is information organised in a binary tree? On a binary tree information is organised through a series of questions that can only be answered 'yes' or 'no'. Eventually only one item is left in the category which forms the end of a branch of the binary tree.

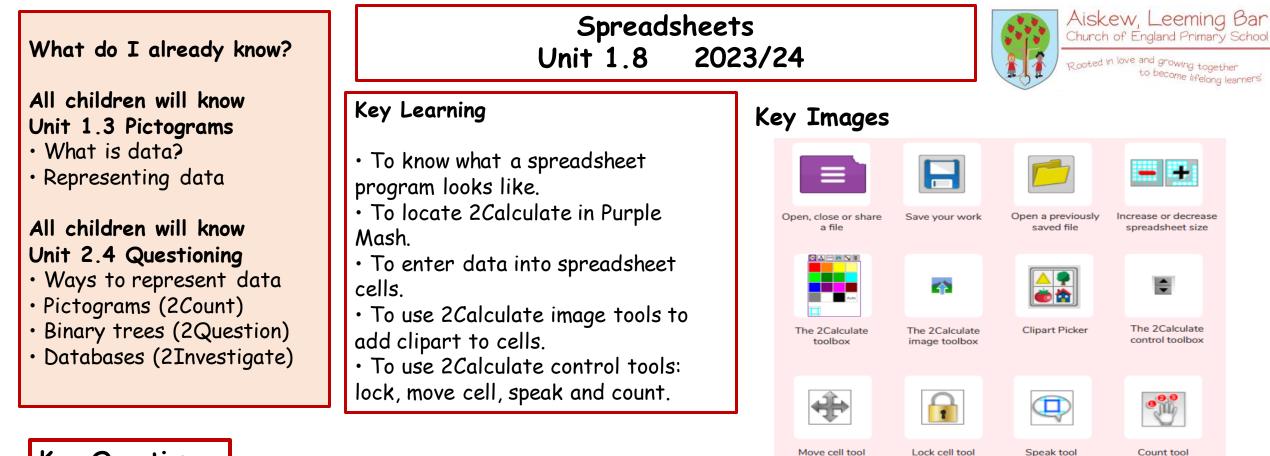
How can a database help organise information? A database is a way of storing information in such a way that it can easily be searched. Databases are designed to hold lots of information that would be difficult to search without using a computer.



Key Questions

What is technology? Technology is the use of knowledge to invent new devices or tools. Throughout history, technology has made people's lives easier.

How does technology make our lives easier? Technology has made life easier in many areas. It is now much easier to communicate around the world. Messages that used to take weeks to reach the sender can now be sent and received in seconds. We are surrounded by technology from your toys, to machines in your house, to systems that control traffic and planes.



Key Questions

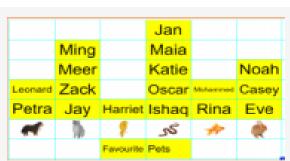
What does a spreadsheet look like? It has a grid of cells. These are in rows and columns. The cells can be coloured, and you can type into them. You can use the toolbox to do different things with the data in the cells.
How could you use a spreadsheet to add up values? You can enter numbers and operators such as +, -, x in the cells. Entering an equals sign in the correct cell will perform calculations.
How could you use the count and speak tools? The count tool will count the number of cells containing the same value or colour as it. The speak tool will say this number each time you click on the cell or the number changes.

What do I already know?	Spreadsheets Unit 2.3 2023/24		Images	
Some children will know Unit 1.8 Spreadsheets • Introduce 2Calculate • Spreadsheet navigation • Adding images • Vocab: cell, column, row Some children will know Unit 1.3 Pictograms • What is data? • Representing data	 Key Learning To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine. To learn how to copy and paste in 2Calculate. To use the totalling tools. To use a spreadsheet for money calculations. To use the 2Calculate equals tool to check calculations. To use 2Calculate to collect data and 	Speak tool Speak tool Totalling	share Save y	your work
Key Questions	produce a graph.	The 2Calcu toolbox		2Calculate rol toolbox

Why would you copy and paste when using a spreadsheet? You might want to rearrange the information in the spreadsheet. It will save you entering the same information many times if you want to repeat things in different cells.

How could a spreadsheet help you when you are planning some shopping? You could use it to store the process and work out how much it would cost to buy the things that you wanted.

Look at the graph made in 2Calculate showing the class' favourite pets. Which is the most popular?



Equals

Open a previously

saved file

Move cell tool

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to become lifelong learners

2Calculate totalling toolbox

Increase or decrease

spreadsheet size

Lock cell tool

'R ooted in love and growing together

