Year 2 Collecting, Organising and Presenting Data Knowledge Organiser

Key words and prior learning from Year 1

Tally Table – a table used to record data as it is counted. It is a quick way of keeping track of numbers in groups of five. One vertical line is made for each of the first four numbers; the fifth number is represented by a diagonal line across the previous four.

Pictogram - is a chart which uses pictures to show data.

Analyse – to look at something in detail to see what we understand from it.

Chart – used to display and compare data by using rectangular bars of different heights. A bar chart has an x and y axis.

X axis – the horizontal line on a chart or graph showing values of something that has been investigated.

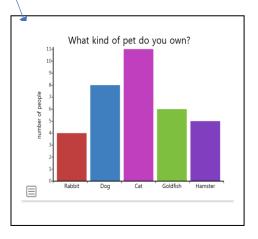**Y axis** – the vertical line on a chart or graph that has numbers of it.

Favorite Pets

Pet	Tally Marks	Number
🐱	ⅢⅡ ⅢⅡ	10
🐶	ⅢⅠ	4
🐯	ⅢⅡ Ⅰ	6

📕 = 1 book

James	📕📕📕	3
Sarah	📕📕	2
Alex	📕	1
Amy	📕📕📕📕📕	5
Terry	📕📕	2

Who read the most? Amy
Who read the least? Alex

Who uses skills like these?

- Scientists to identify objects, nature and animals

- Market researchers will design surveys and questionnaires to find out what people like and don't like

What kind of pet do you own?

(bar chart – number of people: Rabbit 4, Dog 8, Cat 11, Goldfish 6, Hamster 5)

Key Learning

Key Learning	Self-Assessment		
	WT	A	WA
I can create questions with appropriate multiple-choice answers			
I can interpret data from a chart			
I can design a data collection sheet			
I can create charts from information in a tally table			
I can use a branching database to sort data			
I can identify mistakes in a branching database			

New key words we will use in Year 2 'Collecting, Organising and Presenting Data'

Multiple Choice - questions which have given answers for someone to choose from

Branching/Binary Database - a way of classifying a group of objects

Data collection sheet/Survey – a form with at least 3 columns used to collect and organise data or answers to questions (category, tally and frequency)

Graph - a graph is used to show how two different set of data relate to each other

Year 2 Sequencing Simple Algorithms and Programs Knowledge Organiser

Key words and prior learning from Year 1 Simple Algorithms and Programs Part 1 AND Create Simple Programs Part 2

Algorithm – a set of instructions written in plain English – NOT computer code, that a programmer writes to create instructions that will carry out a specific task.

Debug – find the mistake.

Program – instructions written in a language that a standard computer or device understands which is not a language a human would ever use to communicate with another human.

Route-based program – uses simple directional commands forwards, backwards, left and right to control movement.

Encode – turn instructions into code for programming.

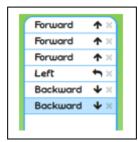**Sequence –** a particular order in which related things follow each other.

Programmer – a person who writes computer programs.

On-screen turtle – acts as a pen on screen that you use for drawing on a virtual canvas.

Predict – say or estimate what you think will happen or will be the consequence of something.

Logical thinking – use what we know and apply it to what might happen to make sense of it all.

How to make a jam sandwich

You need: Bread Butter

Jam Plate

1. First pick up the knife.
2. Spread the butter across the bread.
3. Next spread the jam across the butter.
4. Put the second piece of bread on top.
5. Cut the sandwich in half with the knife.
6. Place the sandwich on a plate.
7. Serve the sandwich.

Forward	↑ ×
Forward	↑ ×
Forward	↑ ×
Left	↰ ×
Backward	↓ ×
Backward	↓ ×

Key Learning	Self-Assessment		
	WT	A	WA
I can give a sequence of commands to complete a specific task			
I can follow a sequence of commands to complete a specific task			
I can predict the movement of the sprite to create a route-based program before I test it out			
I can debug my route-based program during running the program to correct any mistakes			
From given route-based programs I can predict the final outcome before running the program			
I can use given code as a scaffold to modify and make my own			
I can evaluate my algorithms to make judgements on its effectiveness before I create a route-based program to complete a given task			
I can use logical thinking to reverse a route-based program			

New key words we will use in Year 2 Sequencing Simple Algorithms and Programs

Sequence – a particular order in which related things follow each other.

Reverse – do the direct opposite of the stated command.

Who uses skills like these?

- Programmers that update Sat Nav systems

- Programmers that create location services and GPS systems

Year 2 Ways to Present Information – Knowledge Organiser

Key words and prior learning from Y1 unit Just Paint and Write

Online Software – a computer program that is on the internet, I log into this with a username and password. J2e is online software

Image file – this is a picture file that can be used in other software e.g. a picture I can use to write over the top

Program file – if I save a write file, this can be opened and changed and saved again

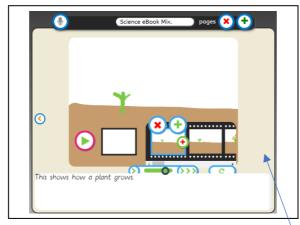**My Files –** This is an area where my J2e work is saved. I can open it again and change my work, then resave it.

Stamps – pictures I can add to an image.

Text – writing on a screen is text.

Who uses skills like these?

- Marketing - people who make posters and posts that include texts and pictures.

- Graphic designers – people who make pictures for use flyers and newsletters.

This shows how a plant grows.

Key Learning	Self-Assessment		
	WT	A	WA
I can access an image saved in My Files			
I can add a picture to a Write file and add text to it.			
I can edit my text in different ways			
I can create several paintings and save them as pictures to use later.			
I can retrieve my work from My Files in J2e, edit it and save it again			
I can make a simple animation of a plant growing			

New key words we will use in Year 2 'Ways to Present Information'

Animate – this software is used to create an animation.

Online images – images can be downloaded from the internet and used in software.

Year 2 Art of Animation – Knowledge Organiser

entrust
Inspiring Futures

Key words and prior learning from Y1 unit Just Paint and Write

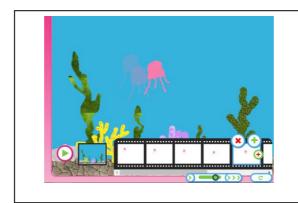**Online Software –** I know this is software on the internet which I have a username and password for.

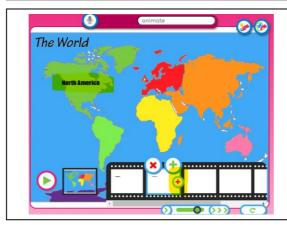**Paint program** - is software that can be used to draw pictures.

Write Program - is software that can be used to write sentences.

My Files – Online storage area in J2e where my work is saved.

Stamps – pictures I can add to an image

Text – writing on a screen is text

Key Learning	Self-Assessment		
	WT	A	WA
I can name and save my work as a JiT Paint file, an image and a stamp.			
I can create several paintings and save them as pictures to use later.			
I can use the textures and colour wheel to add extra detail to my pictures			
I can make use of the 'onion skin' effect to add movement to my JiT animation.			
I know the difference between the duplicate **+** frame and **+** add frame when using JiT animate.			
I can add background images and stamps to my presentation.			
I can create a JiT Paint file and add text to it.			
I know that a frame is an individual picture and when frames are shown in a sequence create an illusion of movement to make an animation.			

New key words we will use in Year 2 'Art of Animation'

Frames– individual pictures in a sequence

Animation – an illusion created by the movement of frames which are shown in sequence e.g. a flipbook is a basic animation

Animation Software – this software can be used to create an animation

Onion Skin – a technique used in creating cartoons and editing movies it helps you decide where to locate or change an image based on the previous frame.

Who uses skills like these?

- Cartoonist, artist and animators.
- Movie makers

Year 2 Create a simple topic-based eBook – Knowledge Organiser V2

Key words and prior learning from Y1 units Just Paint and Write and Collect Photographs and Paint Pictures part 2

Online Software – a computer program that is on the internet, I log into this with a username and password. J2e is online software

Image file – this is a picture file that can be used in other software e.g. a picture I can use to write over the top

Program file – if I save a write file, this can be opened and changed and saved again

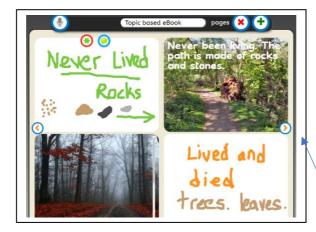**My Files –** This is an area where my J2e work is saved. I can open it again and change my work, then resave it.
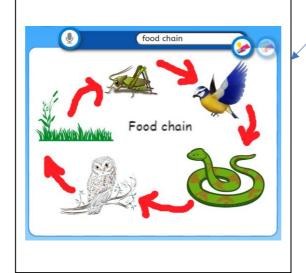
Stamps – pictures I can add to an image.

Text – writing on a screen is text.

Who uses skills like these?

- Magazine creators, and publishers who make books and digital books.

Key Learning	Self-Assessment		
	WT	A	WA
I can add an image from a shared image bank and add text to the image.			
I can create an eBook with at least 5 pages. Can add an image from a shared image bank and add text to the image.			
I can add a complex page with 2 images and 2 text boxes.			
I can retrieve my work from My Files in J2e, edit it and save it again			
I can create a food chain image with pictures and arrows in JIT Paint, I can save this and add it into my topic book.			
I can know that a paint file can be saved as an image			

New key words we will use in Year 2 'Create a topic-based eBook'

Online Image – You can search for images that are saved online

File Types – Files can be saved as different file type such as Paint Files, Write Files, Images and Mix files.

Presentation Software – this software can be used to create an eBook that presents our research