



# Knowledge Organisers - Computing



## EYFS

Computing in EYFS is approached in a cross-curricular way and is not taught as a separate subject. Following and giving instructions (algorithms) happen as part of daily routines and activities. Screen time and safe choices are discussed as well.

## Year 1

| Computing   |   |                         |
|---|---|-------------------------|
|    | Children will learn about technologies in and around their environment and the world. They will be thinking about their uses and in simple terms how they work. |                         |
| We will also be having the laptops out and learning how we log on and access programs. We will also discuss <u>the</u> importance of passwords and keeping them secret. |   |                         |
| computer  | tablet  | camera                  |
|   | television  | laptop                  |
|   | telephone   | interactive white board |
|   | space bar   | login                   |
|   | enter key   | typing                  |

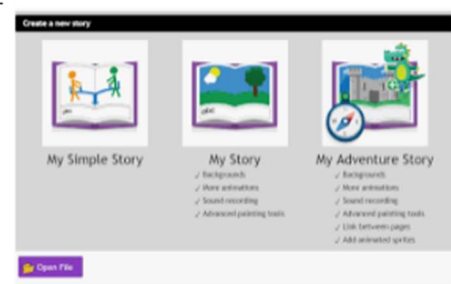
| COMPUTING -   |  |
|---|--|
|  | Children will learn about internet safety and understanding how to keep safe online through stories and drama. |
|   | Vocabulary: <b>internet, safety, unfriendly, friendly, strangers, block,</b>                                   |

| COMPUTING -   |   |
|---|---|
|  | Children will explore Bee-Bots and program them to follow a route.                    |
|   | Vocabulary: algorithms, programming, problem solving, debug, instructions, sequence.  |
|   |  |

# Knowledge Organisers - Computing

## Year 2

### Computing



You will be using your word processing skills to create your own story on the programme '2createastory'. You will have the opportunity to save digital content and explore the different features on this programme.



### Computing- Internet Safety and Animation

In computing this half term, you will be learning about how to stay safe online as well as the world of animation. You will create a simple animation to tell a story.

You will understand the purpose of animation and use the programme Stop Motion on the iPads to create your own animation.

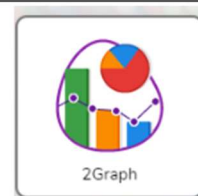


animate, digital content  
manipulate, retrieve,  
simulations, sprite  
technology,  
thaumatropes

# Knowledge Organisers - Computing



## Computing- Data



You will be using a graphing programme to collect, organise and classify data, selecting appropriate tools to create a graph and answer questions. You will make a range of graphs using different programmes on Purple Mash.

|          |         |      |       |
|----------|---------|------|-------|
| chart    | collect | data | graph |
| question | record  | sort | table |

## Year 3

### Computing



You will develop your typing and word processing skills. This will include capitalisation, adding symbols and deleting; as well as basic formatting such as font style, colour and size. You will encounter different text documents and will be asked to alter them. You will also begin to create your own word-processed documents.

YEAR 3 Year 3 Year 3

edit amend highlight align insert resize consent

## Knowledge Organisers - Computing

### Computing

You will learn about the importance of staying safe when using the internet through this topic on E-safety and Email. You will also learn about how to communicate safely and appropriately through the use of email.



|                              |                    |                      |
|------------------------------|--------------------|----------------------|
| <b>computer<br/>networks</b> | <b>E-safety</b>    | <b>recipients</b>    |
| <b>Email</b>                 | <b>Attachments</b> | <b>communication</b> |



### Computing



You will have the opportunity to take photographs using the laptop 'webcam'. You will then upload them and use them within Microsoft Moviemaker to create videos.

|        |            |          |           |            |           |
|--------|------------|----------|-----------|------------|-----------|
| import | transition | software | programme | product    | laptop    |
| design | create     | data     | edit      | multimedia | customise |



# Knowledge Organisers - Computing

## Year 4

### Computing -Wordprocessing

You will be learning some of the functions available in Microsoft Word and Excel to help create, format, edit and present a report. You will consider the effect your choices have on your intended audience. Copyright, consent and online safety will remain a constant consideration.

**Key vocabulary:** Edit, format, functions, present, font, font size, highlight, design, bold, italics, underline, copy, past, cut, word processing, PowerPoint, animations, transition, slide, layout,

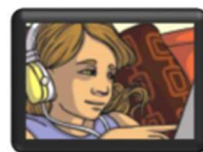


### Computing -Autumn Two

In this unit, you will learn about preventing and dealing with cyberbullying; how to use search engines efficiently; how to avoid plagiarism (copying) online, and how to be a good digital citizen. The unit ends with you applying your new knowledge to design a character for display around school to promote online safety.

**Key vocabulary:**

online, safety, cyberbullying, message, search, search engine, search results, plagiarism, citation, social media, profile, account, private, public, digital citizen, responsibility, community, personal information, share, permission, consent



### Computing - Presentations



You will be learning to produce and enhance a PowerPoint presentation to share with the rest of the class. You will learn to insert pictures, text boxes and to make your presentations more visually attractive by adding animations and hyperlinks.

**Key vocabulary:** Blank presentation, design template, multimedia, slide, animation, background, cursor, copy, paste, insert, .jpg, hyperlink.

# Knowledge Organisers - Computing

## Year 5

### Computing – Programming

You will be using 2Calculate this half-term. You will use the formula wizard to add a formula to a cell to automatically make a calculation. Also, you will learn how to copy and paste and how to add a formula to a cell to automatically make a calculation. You will use 2Calculate tools to test a hypothesis and you will use a spreadsheet to model a real-life situation and answer questions.

#### Key Vocabulary:

- Spreadsheet - an electronic document in which data is arranged in the rows and columns of a grid and can be operated and used in calculations.
- Cells - Cells are the graphical building blocks of a spreadsheet where you input data.
- Rows - a horizontal collection of cells
- Columns - a vertical collection of cells
- Formula - an equation based on many cells
- Input - entering data into one or more cells
- Output - a cell with a value that is calculated based on data in other cells



### Computing – E-Safety

You will be re-visiting your learning all about E-Safety. You will work through different scenarios, considering how to stay safe when online, as well as computing etiquette.

#### Key Vocabulary:

- digital etiquette - electronic standards of conduct or procedure; the rules of behaviour while using technology devices and interacting with others
- passwords - word, phrase or string of characters to differentiate an authorised user
- personal information - any information related to an identifiable person



# Knowledge Organisers - Computing

## Computing – Audacity

You will be learning how to use computers to help you present information in a clear and concise way. You will create a podcast about a sportsperson. It will involve you using Audacity to create and present digital content for a radio podcast. Finally, you will share your podcast with your peers.



### Key Vocabulary:

- input - information going into a computer or program. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device or action
- output - information that comes out of the computer e.g. sound
- jingle - a short slogan, verse, or tune designed to be easily remembered
- Audacity - a digital presentation media app that helps the user record audio (sound) and edit it so that they can share it with others
- podcast - an audio file that users can stream or download and listen to
- virtual - not physically existing as such but made by software to appear to do so
- Presentation media - a tool, application or device used to share information.

## Year 6

### Computing – Publisher

You will be exploring the features of Microsoft Publisher in order to produce a booklet about World War One. The booklet will focus on an aspect of WW1 that you are particularly interested in and wish to share with others. You will conduct your own research and plan your content.



Features of Microsoft Publisher that you will use include: text boxes, fonts, Word Art, picture editing, page borders, templates and colours. You will critically analyse different layouts and designs to ensure a successful, 'fit for purpose' piece of work. You shall compare the success of your wartime booklet and compare your design to those of your friends.

Key vocabulary: Microsoft Publisher, template, font, colour, text box, shapes backgrounds, Word Art.



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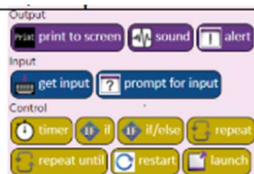


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**Key vocabulary:** Microsoft Publisher, template, font, colour, text box, shapes backgrounds, Word Art.

## Computing - Coding

You will be recapping your previous learning on what coding is and how to code on a computer to provide commands to the computer. You shall be using the computer program '2Code' on Purple Mash Gorilla to create a program with an object that repeats actions several times and moves across a screen. You will change the speed and angle of moving objects by entering in the appropriate algorithms. Additionally, you shall be learning how to create a timer on your program.



**Key Vocabulary:** timer, code, program, angle, movement, repeat, command, selection, variable, launch, restart, character, design, function, vehicle, algorithm, design, property