

# COMPUTING – YEAR 3/4 KNOWLEDGE ORGANISER

## What I should already know:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

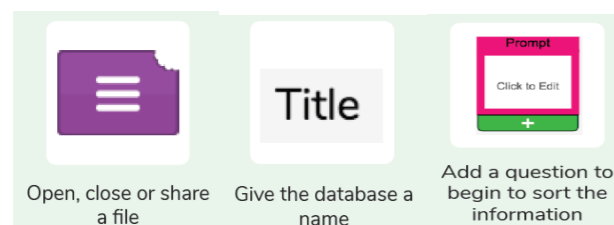
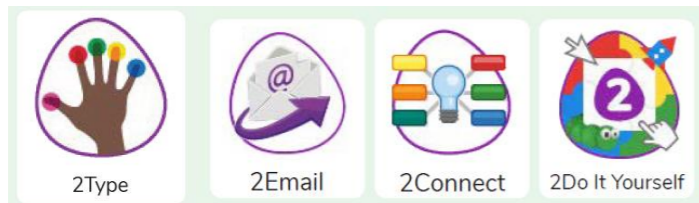
## What I will learn by the end of the units:

- To introduce typing terminology.
- To understand the correct way to sit at the keyboard.
- To learn how to use the home, top and bottom row keys.
- To practise typing with the left and right hand.
- To think about different methods of communication.
- To open and respond to an email using an address book.
- To learn how to use email safely.
- To add an attachment to an email.
- To explore a simulated email scenario.
- To sort objects using just 'yes' or 'no' questions.
- To complete a branching database using 2Question.
- To create a branching database of the children's choice.

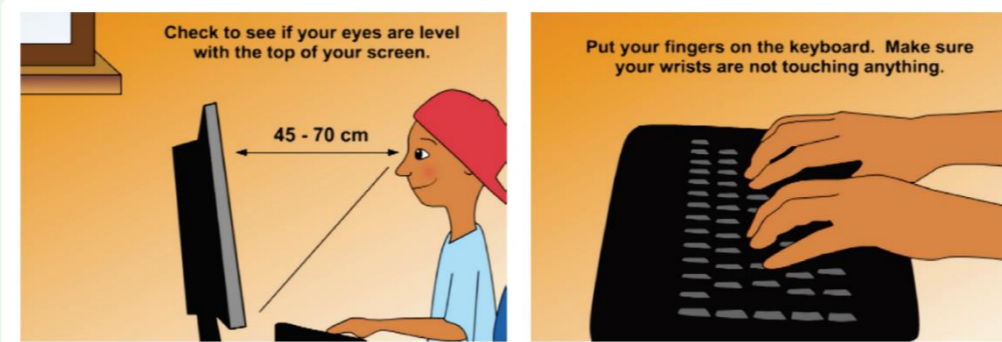
## Key Vocabulary

- Posture** The correct way to sit at the computer.
- Keys** Buttons that are pressed on a computer keyboard or typewriter. These can be described by their position; bottom row, top row and home row (middle row).
- Space bar** The bar at the bottom of the keyboard.
- Typing** The action or skill of writing something by means of a typewriter or in this case a computer.
- Address book** A list of people who you regularly send an email to.
- Attachment** A file, which could be a piece of work or a picture, that is sent with the email.
- Inbox** The folder where new emails go into when they are received.
- Communication** The sharing or exchanging of information by speaking, writing, or using some other medium such as email.
- Compose** To write or create something.
- Email** (Electronic Mail) An Internet service that allows people who have an email address to send and receive instant electronic letters.
- Personal Information** Identifying information about yourself such as your name, address and telephone number.
- CC** A way of sending a copy of your email to other people so they can see the information in it.
- Password** A secret word, phrase or combination of letters, numbers and symbols that must be used to gain admission to a site or application such as email.
- BCC** Blind Carbon Copy: A way of privately sending a copy of your email to other people so they can see the information in it, without the recipient knowing.
- Save to draft** Allows you to compose an email and save it to draft folder to review later before sending.
- Trusted Contact** A person who you know and trust, making an email from them safe to open.
- Binary Tree** Another name for a branching database.
- Branching database** Used to classify groups of objects. It is used to help identify the objects by answering questions with either 'yes' or 'no'.
- Data** A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.
- Database** A collection of data organised in such a way that it can be searched, and information found easily. Database usually refers to data stored on computers.
- Debugging** The process of identifying and removing errors from computer hardware or software.

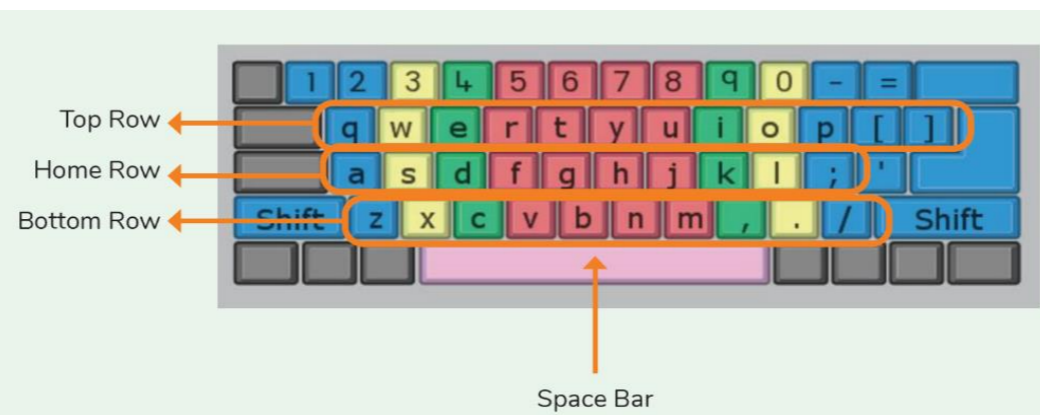
## KEY RESOURCES



<https://www.bbc.co.uk/bitesize/topics/zf2f9j6>

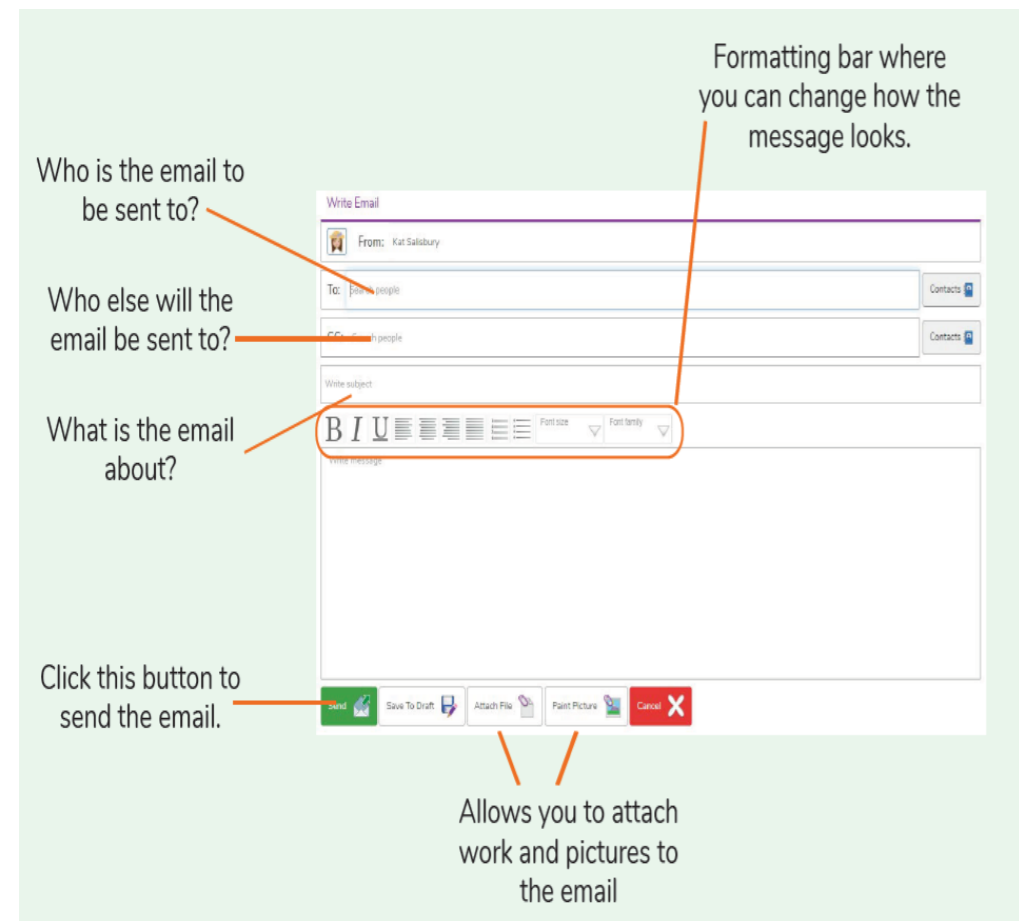
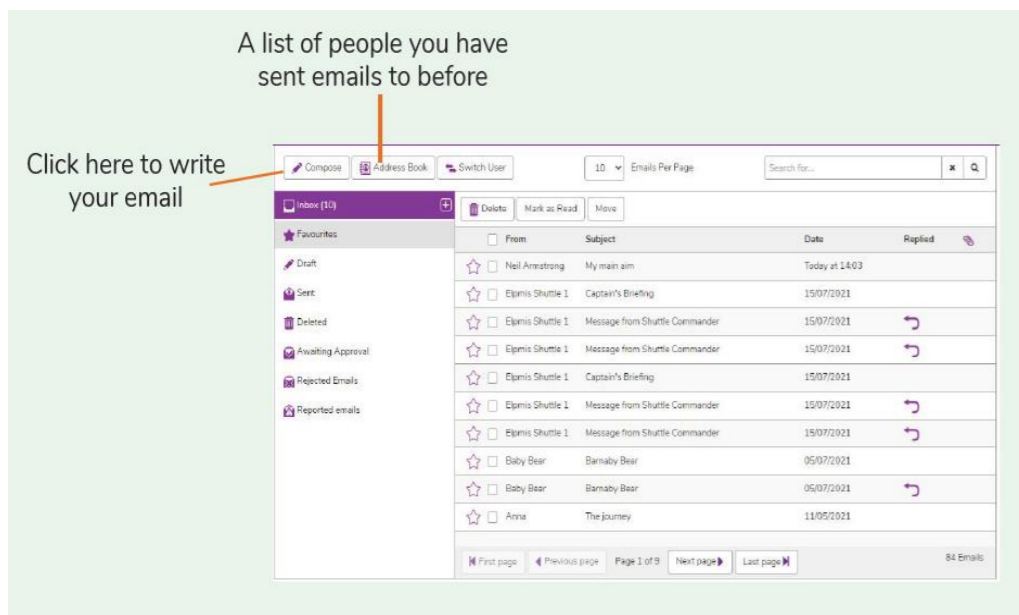


Posture



# COMPUTING – YEAR 3/4 KNOWLEDGE ORGANISER

## EMAIL



### What I will know by the end of the Key Stage:

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital 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, including collecting, analysing, evaluating and presenting data and information.

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

### Key Questions

#### **Why should I have a good posture at the computer?**

A good posture is important to help you avoid any injuries that come from repeatedly using the computer incorrectly.

#### **Why should I type certain keys with certain fingers?**

Using specific fingers for specific keys allows you to type more quickly.

#### **What is email?**

Email is a method of sending electronic communication from one device to another.

#### **What information can I send in an email?**

As well as sending a message, files such as photographs, videos, music and other resources can be attached to the email and sent to the receiver.

#### **What is meant by data?**

Facts about something; data can be words, numbers or pictures. For example, the class register contains data about the names, addresses and attendance of the children in the class.

#### **What is a database?**

A collection of data organised in such a way that it can be searched, and information found easily. Database usually refers to data stored on computers.

#### **What is a branching database?**

Used to classify groups of objects. It is used to help identify the objects by answering questions with either 'yes' or 'no'. Branching databases can also be called binary trees.