

# What is a computer ?



# Year 5 Introductory unit

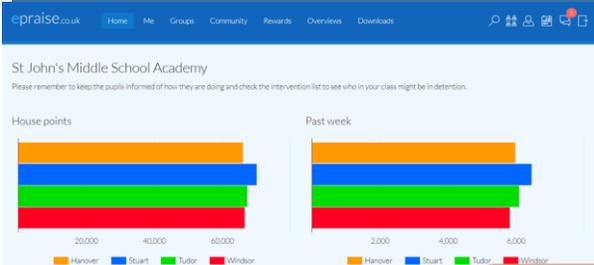
## What do we learn.

1. Rules, hardware and logging on
2. What is a network, Save or save as.
3. Setting up folders
4. Touch typing
5. How to log on and navigate emails.
6. Using Epraise
7. How to screenshot, update and personalise an E-Portfolio

Keywords	Definition
Internet	network, or system, that connects millions of computers worldwide
Network	A computer network connects two or more computers and communication devices. Users can share data, files, or applications on the network as if these resources resided on their respective computers.
Server	a computer that serves many kinds of information to a user or client machine
Email	messages distributed by electronic means from one computer user to one or more recipients via a network.

## Sending and receiving emails.

Yourcomputerlogon@st-johns-bromsgrove.worcs.sch.uk

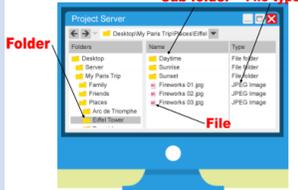


Why should I have a good posture at the computer?  
A good posture is important to help you avoid any injuries that come from repeatedly using the computer incorrectly.

Why should I type certain keys with certain fingers?  
Using specific fingers for specific keys allows you to type more quickly.

## When starting work create a save as.

### Folders, sub-folders & files



### Email is short for 'electronic mail'

#### Advantages of using email

- Can send to multiple recipients at once
- Can send attachments
- Sent instantly at any time
- Can request a receipt that the email has been read
- Can send and receive email from any web enabled device

#### Disadvantages

- Spam
- Viruses
- Phishing
- Need an internet connection
- Your message can only be read when the recipient next logs in and checks their mail

### Sending an email

**To** - enter it here if this email is directly addressed to this person.

**Carbon copy (Cc)** - enter it here if the email needs to be seen by this person but is not addressed to them.

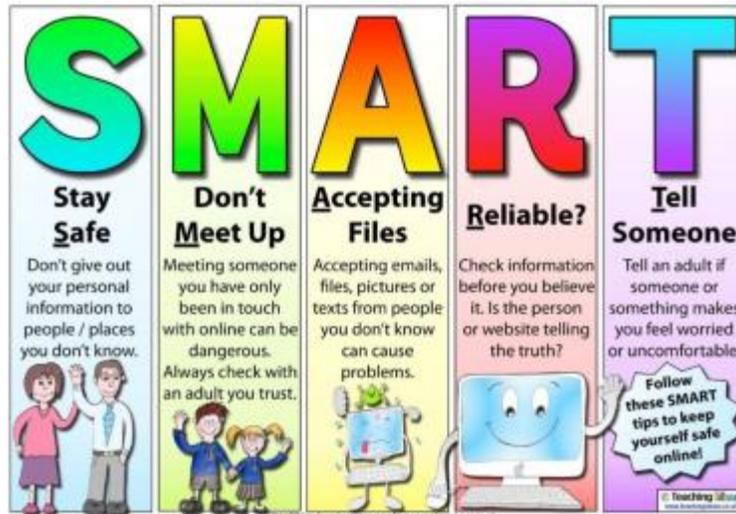
**Blind Carbon copy (Bcc)** - enter it here to prevent other recipients knowing you've sent it to this person.

An e-portfolio is a web-based collection of a student's work gathered over time.

## Key questions

- How can I stay safe online?
- What should I do if I see something that is inappropriate or offensive online?
- What can I do to make sure I am a responsible digital citizen?
- How can I check to see if something I read online is reliable?
- What does SMART mean?

## SMART



## Year 5 E-safety

### What do we learn.

- Explain what a computer virus is.
- Describe how to keep my computer safe from potential threats, such as computer viruses.
- Describe how people may be bullied using mobile phones, email and social media.
- Explain what I need to do if I am being cyber bullied.
- Describe how to keep myself safe when using social media, chatrooms and online gaming where I can communicate with other people.
- Explain who I should accept as an online friend.
- Describe the technique that companies use to advertise online.
- Create a strong password and know how to keep my passwords safe.
- Explain why it is important to back-up my data and I know how to back-up my data.

Keywords	Definition
Data Protection	Making sure the data that people provide is protected from people that should not see it
Social media	Social media refers to websites and applications that are designed to allow people to share content quickly, efficiently, and in real-time.
Responsible online users	Being a responsible digital citizen means having the online social skills to take part in online community life in an ethical and respectful way. Thinking about how your online activities affect yourself, other people you know, and the wider online community.
Privacy	The right to keep information private.

#### Staying safe online

**Never disclose**  
your name telephone number address or school

Never accept someone as a 'friend' on social media simply because they claim to know another friend of yours. **Always be cautious about what you say online.**

Never agree to meet anyone in person that you've only known online. If somebody does start sending you messages that offend or upset you, tell an adult that you trust.

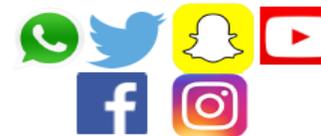
Visit these websites for advice

Webwise  
UK Safer Internet Centre  
ChildLine  
0800 1111

THINK U KNOW

#### Social Media

Social media are apps or websites that people use to communicate with others. Often the age limit for these websites / apps is 13 years old. The information people share is often personal and to stop people seeing it they should change their settings to Private.



What do we do ?

- Know the difference between Save and Save As.
- Spellcheck my documents.
- Apply basic formatting such as text colour, font, size, text alignment, bold, italic, underline and bullet points.
- Insert and resize images and make text wrap around the image.
- Search for and save images from the internet.
- Create and format a table.
- Explain the difference between a Word Processor and a Desktop Publisher.
- Plan and create a magazine front cover.
- Plan and create a newspaper front cover.

# Year 5 Word

## What is word?

Computer software, or simply software, is a collection of data or computer instructions that tell the computer how to work. This is in contrast to physical hardware, from which the system is built and actually performs the work. Software includes: Microsoft Word, Excel, PowerPoint.



Keywords	Definition
Thumbnail	A miniature representation of a page or image
Word Processor	A device or computer program that provides for input, editing, formatting and output of text
Proof read	Means carefully checking for errors in a text before it is published or shared
Font	a graphical representation of text that may include a different typeface, point size, weight, color, or design

### SCHOOL FETE

Saturday 23rd July  
10 am to 2 pm

#### LOTS OF STALLS

- Lucky Dip
- Hook-a-back
- Bouncy Castle
- Cake Stall
- Chocolate Tombola



### SPRING TIME AT THE FARM

Come along to Happy Fields Farm this spring.



- Help feed the new born lambs
- Tractor Rides
- Watch the baby chicks as they hatch
- £5 per adult and children enter for FREE!

When starting work create a save as.



## COMIC BOOK STORE!

Come and try our all new marvel comics!



	day	time
	Monday to Tuesday	09:30-20:00
	Wednesday to Thursday	10:00-20:30
	Friday	08:30-19:00
	Saturday	07:00-17:30
	Sunday	09:00-19:30

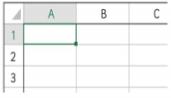
# Common functions

spreadsheet



formula =A1+A2

cell



formulas =A1+A2  
=B1+B2  
=C1+C2

row



calculate



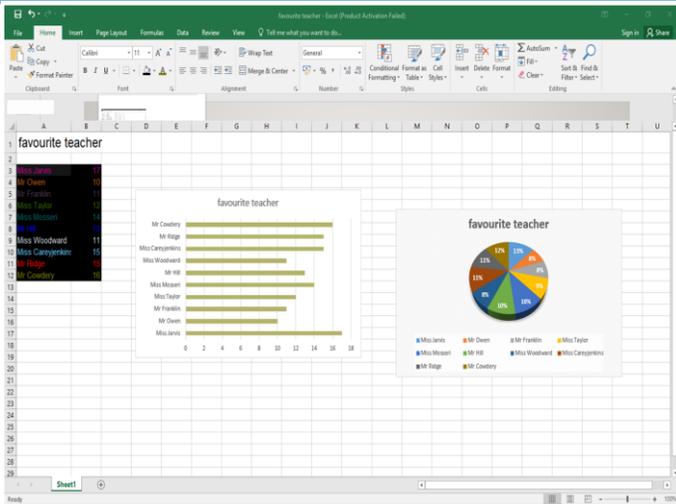
# Year 5 Excel



## What do we learn.

- identify cell references
- understand how different data appears in the cells
- explain the difference between Save and Save As
- create formula using +, -, \* and /
- use the SUM, MIN, MAX and AVERAGE functions
- explain how companies use spreadsheets to test out different scenarios
- use basic formatting to improve the look of my spreadsheet such as adding colour, changing the look of the text, merging cells and changing column widths
- use advanced formatting such as vertical alignment, number formatting and wrap text
- create graphs including suitable labels and titles
- create a spreadsheet from scratch and decide on a suitable layout for the data

## What can you do with Excel ?



## Formatting Cells

The screenshot shows the 'Format Cells' dialog box in Excel. The 'Font' tab is selected, and the 'Font Style' section is highlighted. The dialog box has tabs for Font Style, Borders, Font Size, Cell Colour, and Font Colour. The spreadsheet background shows a grid with the word 'apple' in red, 'orange' in orange, and 'banana' in yellow. A note at the bottom states: 'Note: The exact look may change in different versions of the software.'

Keywords	Definition
Workbook	the workbook refers to an Excel spreadsheet file. The workbook houses all of the data that you have entered and allows you to sort or calculate the results
Worksheet	Within the workbook is where you'll find documents called worksheets. Also known as spreadsheets
Cell	A cell is a rectangle or block housed in a worksheet. Any data that you want to enter into your worksheet must be placed in a cell. Cells can be colour coded, display text, numbers and the results of calculations, based on what you want to accomplish
Cell Reference	cell reference is a set of coordinates that identifies a specific cell. It's a combination of letters and numbers. A5, for example, would point to the cell located where column A and row 5 intersect

## Formula Symbols

Symbol	Meaning	Example
+	Addition	=A1+B1
-	Subtraction	=A2-B2
*	Multiplication	=A3*B3
/	Division	=A4/B4

# Symbols

Name	Symbol	Usage
Terminator		Starts or stops a process.
Input or output		An input is data received by a computer. An output is a signal or data sent from a computer.
Process		An instruction or a command.
Decision		A decision, either yes or no. For example, a decision based on temperature that turns a central heating system on or off.

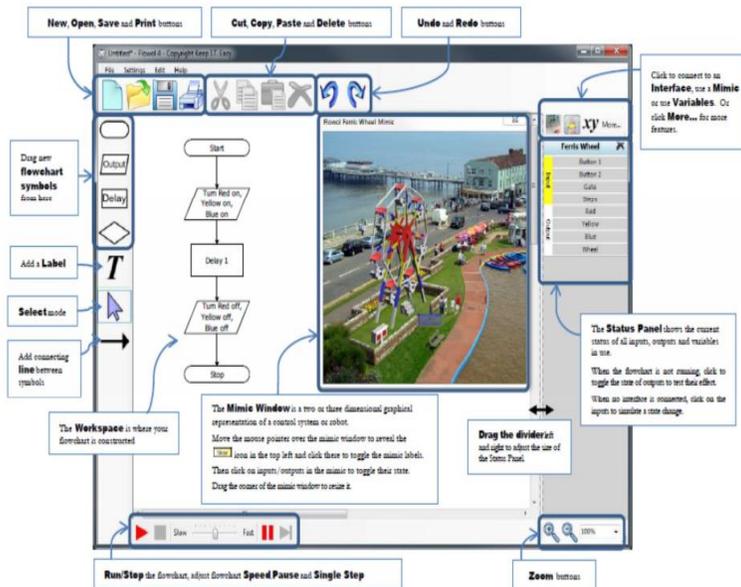
# Year 5 Flowol

## What do we learn.

- Follow written instructions to draw a simple flowchart
- Insert symbols into a flowchart.
- Add inputs into a flowchart.
- Identify conventional symbols, understanding the process of each stage.
- Create a program to control a simple sequence.
- Modify symbols in a flowchart for effect.
- Create flowcharts for multiple inputs and outputs.
- Use decisions and subroutines.
- Program inputs and outputs
- Solve a given problem independently with a flowchart solution, organized into multiple subroutines.
- Create a program to control a sequence with variables.

### Vocabulary

- **Algorithm** a set of rules for solving a problem
- **Flowchart** sequences of instructions set within symbols that lead to a real-life simulation
- **Simulation** A model that produces an output, either visual or physical, as it runs
- **Sequencing** creating a set of instructions to complete a task
- **Loop** repeat an action until a certain condition is met
- **Subroutine** a set of instructions designed to perform a frequently used operation within a program
- **Variable** a memory location to store data for use in decision making
- **Sensor** an object whose purpose is to detect events or changes in its environment, and then provide a corresponding output
- **Programming** the process of writing computer software



New, Open, Save and Print buttons

Cut, Copy, Paste and Delete buttons

Undo and Redo buttons

Click to connect to an Interface, use a Mimic or use Variables. Or click More... for more features.

Drag and drop flowchart symbols from base

Add a Label

Select handle

Add connecting line between symbols

The Workspace is where your flowchart is constructed

The Mimie Window is a two or three dimensional graphical representation of a control system or robot. Move the mouse pointer over the mimic window to reveal the [Mimie] area in the top left and click these to toggle the mimic labels. Then click on inputs, outputs in the mimic to toggle their state. Drag the corner of the mimic window to resize it.

Drag the divider and right to adjust the size of the Status Panel.

The Status Panel shows the current status of all inputs, outputs and variables in use. When the flowchart is not running, click to toggle the state of outputs to test their effect. When an analogue is connected, click on the input to simulate a state change.

Run/Stop the flowchart, adjust flowchart Speed Pause and Single Step

Zoom buttons



Slow ————— Fast

To adjust the speed that the flowchart runs, drag the speed slider to the left to slow the flowchart down, and to the right to speed it up. Return the slider to the middle for normal speed.

### Some of the mimics available





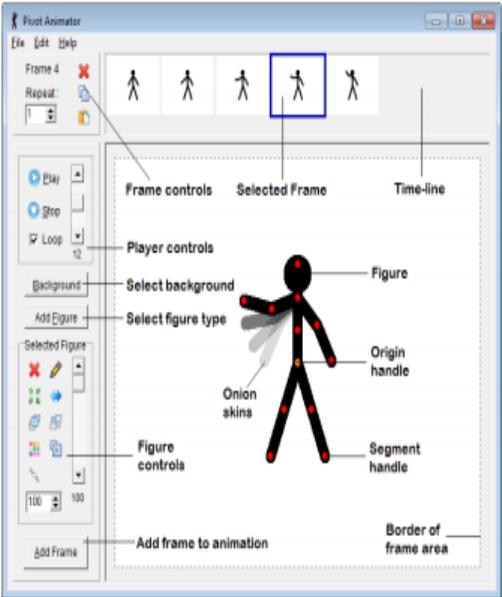
# Year 5 Pivot animator

## How to use.

- Process:**
- Load an image/figure,
  - Use red/orange point segment handles to move image/figure to a required position.
  - Once position set, click add frame.
  - Using the segment handles again to reposition image/ figure and click add frame again.
- Smaller moves and more frames results in a smoother, more fluid animation.

- Additional:**
- Add backgrounds, other objects, other figures and images to add detail, depth and creativity to your animation.

- Where is it used:**
- On websites to catch attention. Used in animation competitions, used to enhance a digital presentation



## What is it ?

Pivot Animation is a freeware application that allows the user to animate stick figures. Pivot is freeware software which means it is free to download and use. Windows GIF Pivot provides a simple, easy to use interface limited features. It uses fixed length 'sticks' to ensure size consistency during animation

What is an animation?

Animation is the process of giving the illusion of movement to drawings, models, or inanimate objects. Animated motion pictures and television shows are highly popular forms of entertainment.

## Keywords :

Animation	Moving objects/figures
Animator	Software to make objects have motion
Export	Set the file type and complete the animation
Figures	Characters to be used in the animation
Objects	Image, figure, text boxes, background, shapes, other
Video	A method to watch the animation when complete
GIF	Graphics Interchange Format, file type to save animation
Store	To hold/save the animation
Edit	To change the animation

<https://pivotanimator.net/>