

MPA International School



YEAR 6

COMPUTING

Reference Resources Booklet (1)

Name :

ID :

Class :

2026-2027 Academic Year

YEAR 6

COMPUTING

Reference Resources Booklet (1)

Preface

At MPA International School, we are committed to nurturing learners who are not only knowledgeable but also capable of guiding their own learning journey. This booklet has been carefully prepared to support our students as a confident, curious, and independent learner by providing clear, structured notes that reinforce key concepts and offer guidance across all related topics.

Each section in this booklet connects directly to the topics of the textbook, offering:

- Clear explanations of key ideas
- Concept summaries for quick revision
- Supportive notes that encourage **self-study** and **personal reflection**

This resource is designed to help students’ **review at their own pace**, explore topics more deeply, and strengthen what they’ve learned in class. Whether they’re preparing for a quiz, completing homework, or simply curious to know more—this booklet is here to guide and support them. Most importantly, use it to grow as a **self-directed learner**—someone who learns with purpose, confidence, and curiosity.

This resource is not meant to replace active learning or classroom discussion but to empower students to revisit important content at their own pace—whether reviewing after a lesson, preparing for a quiz, or exploring further out of curiosity.

We hope this booklet empowers you to take ownership of your learning with purpose and pride.

Academic Team

MPA International School

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Computer Systems

What is a Computer System?

A **computer system** is a combination of **hardware** and **software** that work together to input, process, store, and output data.

Hardware and Software

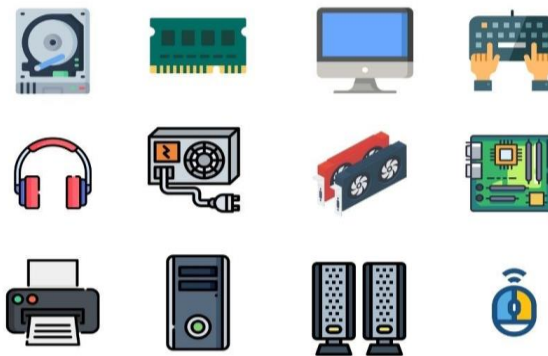
- **Hardware**

Hardware is the physical parts of a computer that you can touch.

Examples:

Examples of Computer Hardware

- CPU
- Keyboard
- Monitor
- Hard Drive
- RAM



- **Input**

Input means entering data into a computer.

Examples of Input Devices:

- Keyboard
 - Mouse
 - Microphone
 - Scanner
 - Camera
-

- **Process**

Process means the computer works with the input data.

Main processing device:

- CPU (Central Processing Unit)



-
- **Output**

Output means information produced by a computer.

Examples of Output Devices:

- Monitor
- Printer
- Speakers
- Headphones

-
- **Software**

Software is a set of instructions that tells a computer what to do.

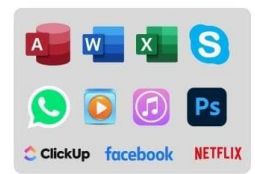
Types:

- **System Software** – runs and controls the computer
Example: **Operating System (Windows, macOS)**
- **Application Software** – helps users complete tasks
Example: **Word processor, Spreadsheet, Presentation software**

System Software



Application Software



Types of Application Software

Software	Purpose
System Software	Controls the computer and allows application software to run.
Word Processing	Create and edit documents.
Spreadsheet	Organise data and perform calculations.
Presentation	Create slide presentations.
Web Browser	Access websites.

Database & Spreadsheet

Data

Data is a collection of facts, information, or observations.

Examples:

- Student name
 - Age
 - Marks
 - Date of birth
-

Database

A **database** is a collection of data stored in one place.

Purpose of a database:

- Store information
 - Organise data
 - Search data easily
 - Filter and analyse information
-

Record and Field

Record

A **record** is one complete set of information about one item or person.

- Shown as a **row** in a database table.

Example:

Student ID	Name	Age
ST101	Emma	11
ST101	Jhon	12

The whole row is **one record**.

Field

A **field** is one piece of information inside a record.

- Shown as a **column** in a database table.

Examples:

- **Student ID** field
 - **Name** field
 - **Age** field
-

Data Types

Data Type	Meaning	Example
Text	Letters and words	Student Name
Number	Numbers only	Age, Marks
Alphanumeric	Letters and numbers together	ST101
Date	Dates	04/08/2026

Hard Copy and Soft Copy

Hard Copy

Data printed on paper.

Examples:

- Printed report
- Exam paper
- Printed document

Soft Copy

Data stored electronically.

Examples:

- File on a laptop
- Photo on a smartphone
- Document on a computer

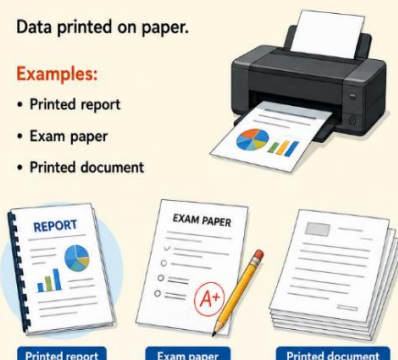
Hard Copy and Soft Copy

HARD COPY

Data printed on paper.

Examples:

- Printed report
- Exam paper
- Printed document



Printed report **Exam paper** **Printed document**

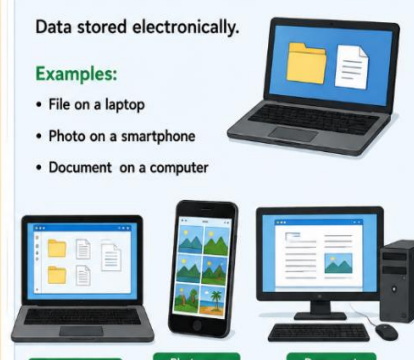
Hard copy is physical paper that we can touch and see.

SOFT COPY

Data stored electronically.

Examples:

- File on a laptop
- Photo on a smartphone
- Document on a computer



File on a laptop **Photo on a smartphone** **Document on a computer**

Soft copy is digital data that we can store, edit and share easily.

Query and Filter

Query

A **query** is a request to find specific information from a database.

Example:

- Find students in Class 6A.
-

Filter

A **filter** shows only selected information and hides the rest.

Example:

- Show only students with Class 6A.
-

Spreadsheet Basics

Common Spreadsheet Terms

Term	Meaning
Cell	One box in a spreadsheet
Row	Horizontal line
Column	Vertical line
Formula	Calculation

Formatted Table

A **formatted table** is a table that has been styled using spreadsheet tools so the computer recognises it as a database.

Benefits:

- Easier to sort data
 - Easier to filter data
 - Better organised
-

Unformatted Table

An **unformatted table** is a normal table where data is typed into cells.

It does **not** have special table features.

Formatted Table vs Unformatted Table

Formatted Table

A formatted table is neat and easy to read.
It has borders, headings, and consistent formatting.

Student ID	Name	Age	Class	Marks
ST101	Emma	11	6A	85
ST102	Jhon	12	6A	78
ST103	Mia	11	6B	92
ST104	Liam	12	6B	88
ST105	Noah	11	6A	90

Borders

Cells are separated by borders.

Headings

Column headings describe the data.

Alignment

Data is aligned neatly.

Shading

Alternating colors improve readability.

Formatted tables are easy to read, understand, and look professional.

Unformatted Table

An unformatted table is plain and difficult to read.
It has no borders or headings.

Student ID	Name	Age	Class	Marks
ST101	Emma	11	6A	85
ST102	Jhon	12	6A	78
ST103	Mia	11	6B	92
ST104	Liam	12	6B	88
ST105	Noah	11	6A	90

No Borders

Hard to distinguish between data.

No Headings

Difficult to know what each column represents.

No Alignment

Data is not aligned and looks untidy.

No Shading

All rows look the same, hard to read.

Unformatted tables are difficult to read, understand, and look untidy.

Sorting

Sorting means arranging data in a specific order.

Types of Sorting

- **A → Z** (Alphabetical order)
- **Z → A** (Reverse alphabetical order)
- **Small → Large** (Numbers)
- **Large → Small** (Numbers)

Filtering

Filtering means showing only the data you want.

A filter:

- Shows selected data
 - Hides unwanted rows
 - Does **not** delete any data
-

Formula

A **formula** is an equation used in a spreadsheet to calculate values automatically.

Note:

Every formula starts with an **equals sign (=)**.

Example:

=5+3

Result = 8

Why Use Formulas?

- Calculate data quickly
 - Save time
 - Reduce mistakes
 - Update answers automatically when data changes
-

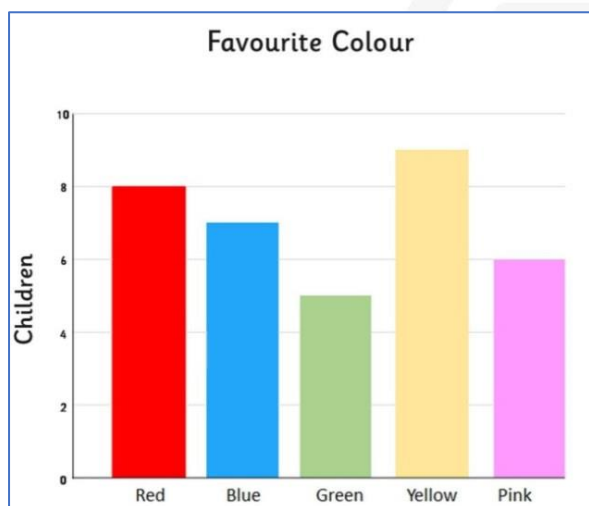
Charts

A chart displays data visually.

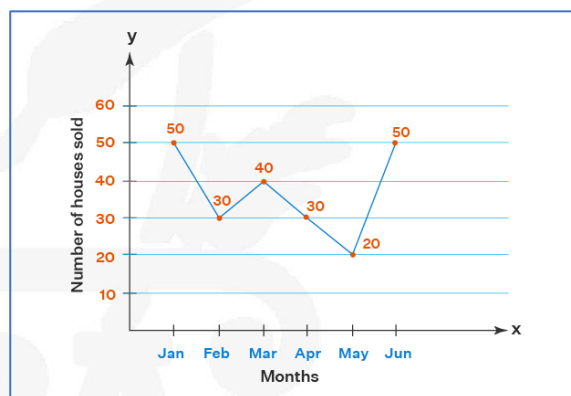
Common chart types:

Chart	Use
Bar Chart	Compare values
Line Chart	Show changes over time
Pie Chart	Show parts of a whole

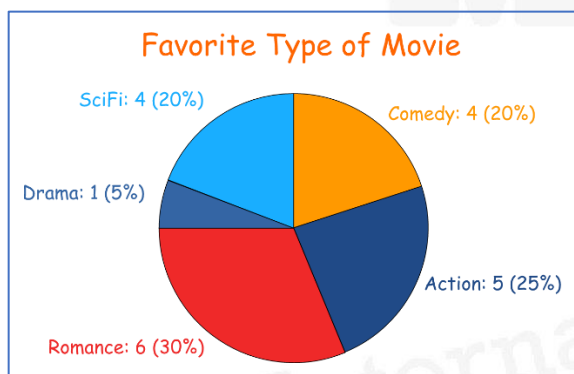
Bar Chart



Line Chart



Pie Chart



Summary

- **Field = Column**
- **Record = Row**
- **Database** = Collection of data
- **Formatted Table** = Table with spreadsheet features
- **Unformatted Table** = Normal table
- **Sorting** = Arrange data
- **Filtering** = Show selected data only
- **Formula** = Calculation
- Every formula starts with =
- A filter **hides** data but **does not delete** it.
- Count the **rows of data** (not the headings) to find the number of **records**.

Using Word Processing

Text Formatting Tools

Tool	Purpose	Shortcut
Bold	Makes text thicker and darker	Ctrl + B
Italic	Slants text	Ctrl + I
Underline	Draws a line under text	Ctrl + U
Font Size	Changes the size of text	—
Font Colour	Changes the colour of text	—

Line Spacing

Line spacing changes the space between lines of text.

Purpose:

- Makes documents easier to read.
-

Text Alignment

Horizontal Alignment

Alignment	Meaning
Left Align	Text starts at the left margin.
Centre Align	Text is in the middle.
Right Align	Text starts at the right margin.
Justify	Text is even on both the left and right sides.

Vertical Alignment

Alignment	Meaning
Top Align	Text starts at the top.
Middle Align	Text is in the middle.
Bottom Align	Text is at the bottom.

Basic Picture Editing

Feature	Purpose
Crop	Removes unwanted parts of a picture.
Resize	Makes a picture bigger or smaller.
Rotate	Turns a picture.

Creating a Table

A **table** is used to organize information into **rows and columns**.

Steps

1. Click **Insert** → **Table**.
2. Select the number of rows and columns.
3. Enter the information.
4. Save the document.

Text Wrap (Wrap Text)

Text Wrap displays all the text inside a cell by moving it onto multiple lines.

Version A	Version B
FIFA WORLD CUP 2026	FIFA WORLD CUP 2026

Columns in Microsoft Office Word

A **column** is a vertical section of text on a page.

How to make columns:

1. Select the text (or place the cursor where you want the columns).
2. Click the Layout tab.
3. Click Columns.
4. Choose the number of columns (e.g. One, Two, or Three).

Version A

It was great to see you
today as we have not
seen each other for
ages.

Version B

It was	we have
great to	not seen
see you	each
today as	other for
	ages.

Sensible Filename

A sensible filename is a clear and meaningful name for a file so it is easy to find later.

Good Examples:

- Y6_Student_Record.xlsx
- Y6_Test_Results.xlsx
- Y6_John_Spreadsheet.xlsx

References

- <https://pearson.com>
- Teacher made worksheet

