



YEAR 7

COMPUTING

Reference Resources Booklet (1)

Name :

ID :

Class :

2026-2027 Academic Year

YEAR 7

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

Content

Internet & World Wide Web (WWW).....	1
What is the Internet?	1
Internet Connectivity.....	1
What is the World Wide Web (WWW)?	1
Internet vs World Wide Web	2
Online Safety and Respect	2
Fake or Spoof Websites	2
Spotting Fake Content.....	3
Respectful Behavior Online	3
Staying Safe Online.....	4
Search Engines & Online Copyright.....	5
What is a Search Engine?.....	5
Judging Search Results.....	5
Online Copyright Basics	6
Password Security	7
Strong Password Rules.....	7
Tips for Creating Strong Passwords	7
Password Don'ts	8
Alternatives to Passwords (Biometric data)	8
Creating a Presentation	9
Project Brief	9
Target Audience.....	9
Presentation Terminology.....	10
Networks & Bandwidth	11
Network Connections.....	11
Wired Networks	11
Wireless Networks	11
Network Devices.....	12
Wireless Network Security.....	13
Satellite Communication.....	13
Internet Bandwidth.....	14
Bandwidth vs Internet Speed.....	14

Internet & World Wide Web (WWW)

What is the Internet?

- The Internet is a **global network of connected computers**.
 - It allows devices to **share and access information** around the world.
-

Internet Connectivity

Devices connect to the Internet using:

- **Wired connection** – Uses cables (Ethernet).
- **Wireless connection** – Uses Wi-Fi or mobile data.

Connectivity = How devices connect to the Internet.

What is the World Wide Web (WWW)?

- The **World Wide Web (WWW)** is a collection of **web pages and websites** stored on servers.
- We use a **web browser** (such as Chrome, Edge, or Firefox) to view web pages.

WWW = Websites and Web Pages

Internet vs World Wide Web

Internet	World Wide Web (WWW)
Global network of computers	Collection of websites and web pages
Connects devices worldwide	Contains online information
Infrastructure (network)	Content we view
Needed to access the Web	Accessed using a web browser

Key Notes

- **Internet** – Global network of connected computers.
- **Connectivity** – How devices connect to the Internet.
- **Wired Connection** – Connection using cables.
- **Wireless Connection** – Connection using Wi-Fi or mobile data.
- **World Wide Web (WWW)** – Collection of websites and web pages.
- **Web Browser** – Software used to access websites (Chrome, Edge, Firefox).

Online Safety and Respect

Fake or Spoof Websites

What is a Fake or Spoof Website?

A fake or spoof website is a website that contains false information or tries to trick users into sharing personal information.

Why Be Careful?

- Anyone can post information on the Internet.
- Not all online information is true.
- Always check if a website is trustworthy.

Spotting Fake Content

What is Fake Content?

Fake content is information created to mislead or trick people.

How to Check if Information is True

- **Check the URL** for spelling mistakes.
 - **Cross-reference** with trusted websites or news sources.
 - **Ask a trusted adult or teacher** if you are unsure.
-

Respectful Behavior Online

Being kind and polite to other people when using the Internet.

Remember

Treat people online the same way you treat them in real life.

Example

Posting unkind comments online is a form of bullying.

Staying Safe Online

Protecting yourself and your personal information while using the Internet.

How to Stay Safe

- Keep your passwords secret.
- Never share personal information.
- Tell a trusted adult if something online worries you.
- Use the **Report** button when necessary.

Key Notes

Term	Meaning
Fake website	= A website with false information
Spoof website	= A website designed to trick users
Fake content	= Information created to mislead people
URL	= A website address
Cross-reference	= Compare information with trusted sources
Respectful behavior	= Being kind and polite online
Personal information	= Private details about yourself
Report button	= A tool to report harmful online content

Search Engines & Online Copyright

What is a Search Engine?

A **search engine** is a website that helps you find information on the Internet using **keywords** or **search terms**.

Examples:

- Google
 - Microsoft Bing
 - Yahoo!
 - DuckDuckGo
-

Judging Search Results

Before using information online, check if the website is reliable.

1. Ads & Shopping Sites

- The first results may be **paid advertisements** or shopping websites.
- They are not always the best source of information.

2. Authority & Bias

- Check **who wrote the information**.
- Trusted organizations are usually more reliable than personal blogs.
- Be aware of **bias** (personal opinions).

3. Relevance & Age

- Make sure the information matches your topic.
- Check when the page was **last updated** to ensure it is current.

Note:

Reliable websites are accurate, trustworthy, and up to date.

Online Copyright Basics

What is Copyright?

Copyright is the **legal right** that protects someone's original work.

Examples of Copyrighted Work:

- Text
- Images
- Music
- Videos
- Games
- Apps

Note:

Do not copy or use someone else's work without permission.

Key Words to Remember

- **Search Engine** – Website used to find information online.
 - **Keyword/Search Term** – Words used to search.
 - **Advertisement (Ad)** – Paid search result.
 - **Authority** – The person or organization providing the information.
 - **Bias** – Personal opinion that may affect information.
 - **Relevance** – Information matches your topic.
 - **Copyright** – Legal protection for original work.
-

Password Security

What is a Password?

A **password** is a **sequence of letters, numbers, and symbols** used to access a computer, website, or online account.

Why are passwords important?

They protect your personal information, such as:

- Banking details
 - Medical records
 - Social media accounts
-

Strong Password Rules

A strong password should:

- Be **at least 8 characters** long.
 - Use **uppercase and lowercase letters**.
 - Include **numbers**.
 - Include **special characters** (e.g. #, \$, !, @).
-

Tips for Creating Strong Passwords

- Make the password as **random** as possible.
 - Change passwords every few months.
 - Use a memorable **phrase** to help remember it.
-

Password Don'ts

- ✗ Don't use personal information (name, birthday, pet's name).
- ✗ Don't tell anyone your password.
- ✗ Don't reuse the same password for different websites or apps.

Notes:

Keep your password private and unique.

Alternatives to Passwords (Biometric data)

What is Biometric Data?

Biometric data uses your unique physical features to unlock a device instead of typing a password.

Examples:

- Face recognition
 - Fingerprint scanning
 - Iris or retina scanning
-

Key Words to Remember

- **Password** – Secret code used to access an account.
 - **Strong Password** – Long, random, and uses different character types.
 - **Special Character** – Symbols like #, \$, !, @.
 - **Biometric Data** – Uses physical features for identification.
 - **Fingerprint** – Uses your fingerprint to unlock.
 - **Face Recognition** – Uses your face to unlock.
 - **Iris/Retina Scan** – Uses your eye for identification.
-

Creating a Presentation

Project Brief

A **project brief** is a document that gives the requirements for a presentation.

It includes:

- **Topic** – What the presentation is about.
 - **Main tasks** – What needs to be completed.
 - **Target audience** – Who the presentation is for.
 - **Required format** – How the work should be created.
-

Target Audience

A **target audience** is the group of people a presentation is designed for.

It can be defined by:

- Age
 - Gender
 - Interests
 - Location
 - Social and economic factors
-

Presentation Terminology

Slides

- The pages of a presentation.

Layout

- The arrangement of text, pictures, and graphics on a slide.

Animation

- Visual effects applied to objects or text on a slide.
- Example: Making a picture appear or disappear.

Transition

- Visual effects used when moving from one slide to another.
- Example: Fade, dissolve, or other slide change effects.

Design Theme

- A ready-made style that controls:
 - Backgrounds
 - Fonts
 - Colors
 - Overall presentation style

Master Slide

- A template used to apply the same design and formatting to multiple slides at once.
-

Key words

Animation = Effect on objects inside a slide

Transition = Effect when changing slides

Layout = Position of content on a slide

Master Slide = Same design for many slides

Networks & Bandwidth

Network Connections

Devices connect to networks using:

Wired Networks

- Use cables to connect devices and transfer data.
- Examples:
 - **Ethernet cable**
 - **Fibre-optic cable**

Advantages:

- Fast speed
- Reliable connection
- More secure

Disadvantages:

- Requires cables
- Limited movement

Wireless Networks

- Connect devices without cables using wireless signals (Wi-Fi).

Advantages:

- No cables needed
- Flexible and easy to use
- Easy to add devices

Disadvantages:

- Slower than wired networks
 - Signal interference
 - Limited range
 - Higher security risk
-

Network Devices**Router**

- Connects a local network to the Internet.

ISP (Internet Service Provider)

- Provides Internet access to users.
-

Wireless Network Security

Encryption

- Protects Wi-Fi data from unauthorized users.
- Requires a password to connect.
- A strong password helps prevent hackers.

WPA3

- The latest Wi-Fi security standard.

Note:

Encryption = Keeps data safe

Satellite Communication

- Satellites orbit Earth and use radio waves to send and receive data.

Uses:

- TV broadcasts
- Phone calls
- Radio
- GPS
- Government communication

Advantages:

- Worldwide coverage
- Works in remote areas
- Fast communication

Disadvantages:

- Expensive
 - Weather can affect signals
 - Communication delay
-

Internet Bandwidth

What is Bandwidth?

- The amount of data that can be transferred in a certain time.
- Measured in **bits per second (bps)**, such as **Mbps**.

Higher bandwidth = More data transferred = Better performance

Bandwidth vs Internet Speed

Bandwidth	Internet Speed
Amount of data that can be sent	How fast data is transferred
Measured in bps	Measured by transfer speed

Key Words to Remember

- **Router** → Connects local network to Internet
 - **ISP** → Provides Internet access
 - **Wired** → Uses cables
 - **Wireless** → Uses Wi-Fi signals
 - **Encryption** → Protects data
 - **WPA3** → Latest Wi-Fi security standard
 - **Bandwidth** → Amount of data transferred over time
 - **bps** → Unit for measuring bandwidth
-

References

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