

## Year 7 | Theme 1

### The Internet and the WWW

#### What is "The Internet" ?

- "The Internet" is a wide area network of computers across the world, connected by cables.
- The cables run under pavements, across towns and cities and under the sea to other countries
- The computers store information so we can access it via our computers, tablets or phones

**\*\*Did you know there are around 550,000km of cables running under the sea connecting countries?\***

#### What is "The World Wide Web"?

- "The WWW" is the many web pages which we access using the Internet.
- To access the World Wide Web you need a web browser, such as Safari, Microsoft Edge or Google Chrome.
- Web pages each have an address (URL – Uniform Resource Locator), for example [www.youtube.com](http://www.youtube.com)
- Web pages are linked to other pages, using hyperlinks, which are then connected to other web pages. This creates "the web"

#### Some Key Terms

- **Web browser** – software such as Google Chrome, Safari, Internet Explorer, that allows us to see web pages and other content on the WWW
- **URL – Uniform Resource Locator**. Another name for the address of a web page, eg [www.turton.uk.com](http://www.turton.uk.com)
- **HTML – Hypertext Markup Language** – the script used to create web pages. It helps structure the information on the page as well as designing the look of the page. It uses <tags> such as <img>, <body> and <head>

#### Email

- My school email address is [019 or 020...@turton.uk.com](mailto:019 or 020...@turton.uk.com)
- In school emails can be monitored and they are filtered so avoid using abusive language
- Attachments can be added to an email, such as Word documents or image files
- Be careful if you receive an email from someone you don't recognise, especially if it has a link or attachment. This could lead to you downloading a virus onto your computer

**\*\*Did you know that 269 billion emails were sent each day in 2017. That's 36 per person**

#### Uses and problems of the Internet

- **Communication** – Email; instant messaging; Social Networking; Forums; Video Conferencing; VoIP (voice over Internet Protocol)
- **Research** – How do you know it's up to date? Who wrote the research? Are they credible?
- **Financial transactions** – Ensure you are using a secure connection so your financial details cannot be intercepted. Keep your passwords secret and difficult to guess. Safer passwords are long, with a mix of characters in UPPER and lowercase, as well as some numbers and \$symbols!
- **News and keeping up to date** – Fake news? How up to date is the news? Is it credible? Is it bias?

#### There and back.... a packets tale

What happens when you want to view a web page?

- You use a **web browser** and type in a **URL** (eg [www.youtube.com](http://www.youtube.com))
- The URL is translated to an **ip address** (eg 181.477.54.11) using a **DNS server**
- The request is sent to the **web server**
- The web server returns the requested web page by breaking it down into **packets**
- The web browser puts the packets back together so you see the complete web page.