



Discovering The
Internet & Email

EQUALITY

EDUCATION



DEVELOPMENT

One of the main things that people want to use computers for is to access the internet. The **Internet** (often just called the **net**) is the global network that allows any computer to communicate with any other computer.

The **Worldwide Web** (often just called the **web**) is an information-sharing network built on top of the internet. Although they refer to different things people often use the terms internet and web interchangeably. Like someone might say either, *“I’ll be travelling on the train,”* or *“I’ll be travelling on the railway,”* so they might say, *“I found it on the web,”* or *“I found it on the internet.”*

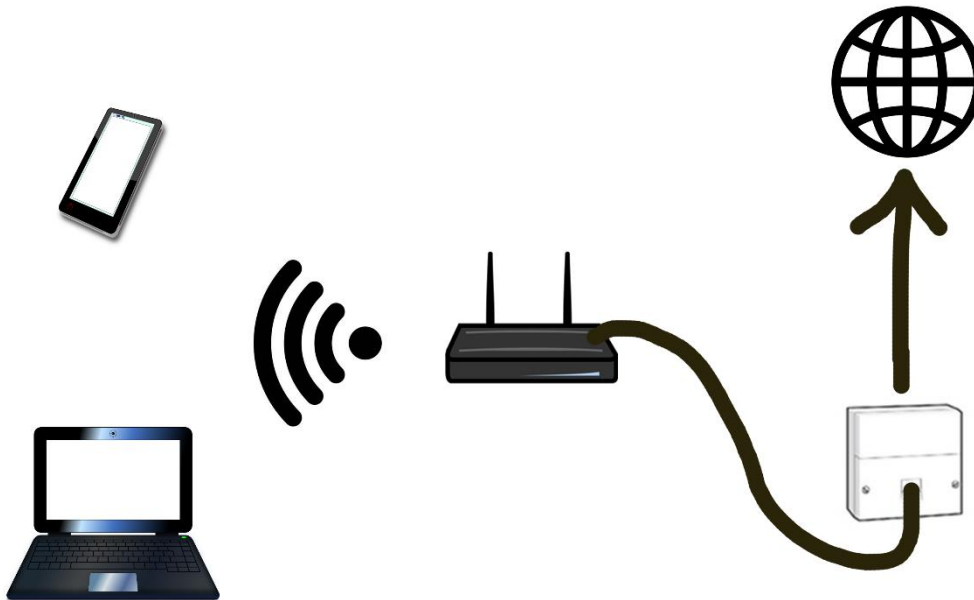


Other terms you might regularly hear are **Broadband** and **Wi-fi**. Broadband is a type of internet connection which uses a wider bandwidth than the original internet connections, enabling more data to travel down the line more quickly. It is now pretty much standard, although speeds vary depending on the quality of the network in the area you are in.



You connect to the internet over a telephone line (or maybe cable TV network). Like with telephone calls, your internet information is converted into code to send it down the line. This is done via a modem, which is connected to your phone line.

A router will connect your computer to the modem. These days many modems come with built-in routers. They used to be connected via cables but these days most are connected wirelessly by creating a local **Wi-fi** network. Wi-fi networks might be public and freely accessible, private and secured by passwords, or semi-public, whereby the network is secured by a password but the password is shared with customers (and is to all intents and purposes public).



This might all be beginning to sound quite complicated – but anything sounds complicated when you break it down into components. We usually just use them without worrying about the detail of how they work. It’s the same here. In most cases you connect to the internet by connecting to the wi-fi. You don’t worry about the rest.

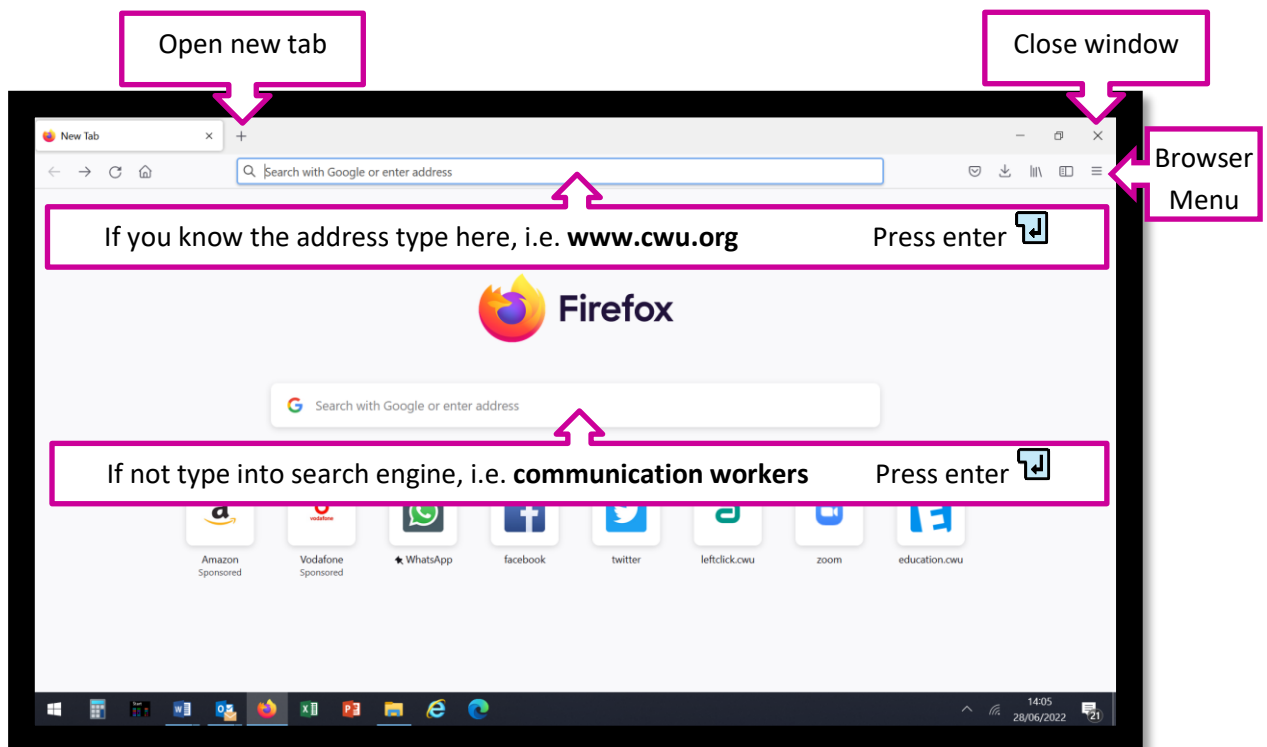
When you add broadband to your phone or TV subscription your provider will probably send you a modem and the necessary software as part of your subscription. When you first set it up, the software will guide you step by step.

You access the internet via a web browser. Most computers, tablets and phones come out of the factory with a web browser pre-loaded. Your internet provider will also probably include a web browser when you are setting up. There are a number of different popular web browsers. Some people prefer one or the other but they all do the job.



On your desktop, double click on the web browser icon. This will open a new window, usually the home page of the browser company. At the top of the page is an address bar. Click on this and type in the address of the website you are looking for. Then press the enter key and you will be taken to the web address you have requested.

If you wish, you can open more than one website at a time. Most browsers offer you additional tabs that will open a new screen within the existing browser window. Usually they have a little + sign by them as highlighted. Remember: if you close the browser window you close all the tabs within it. But you can recover them by clicking your browser history on the menu and restoring your previous session.



Once you are on the web you can find pretty much any information you are looking for. From Government information, to global, crowd-sourced encyclopaedias, to your favourite TV shows. You can book your holidays or visit your favourite shops. They will put their web address on their publicity, usually something like www.ourshop.com

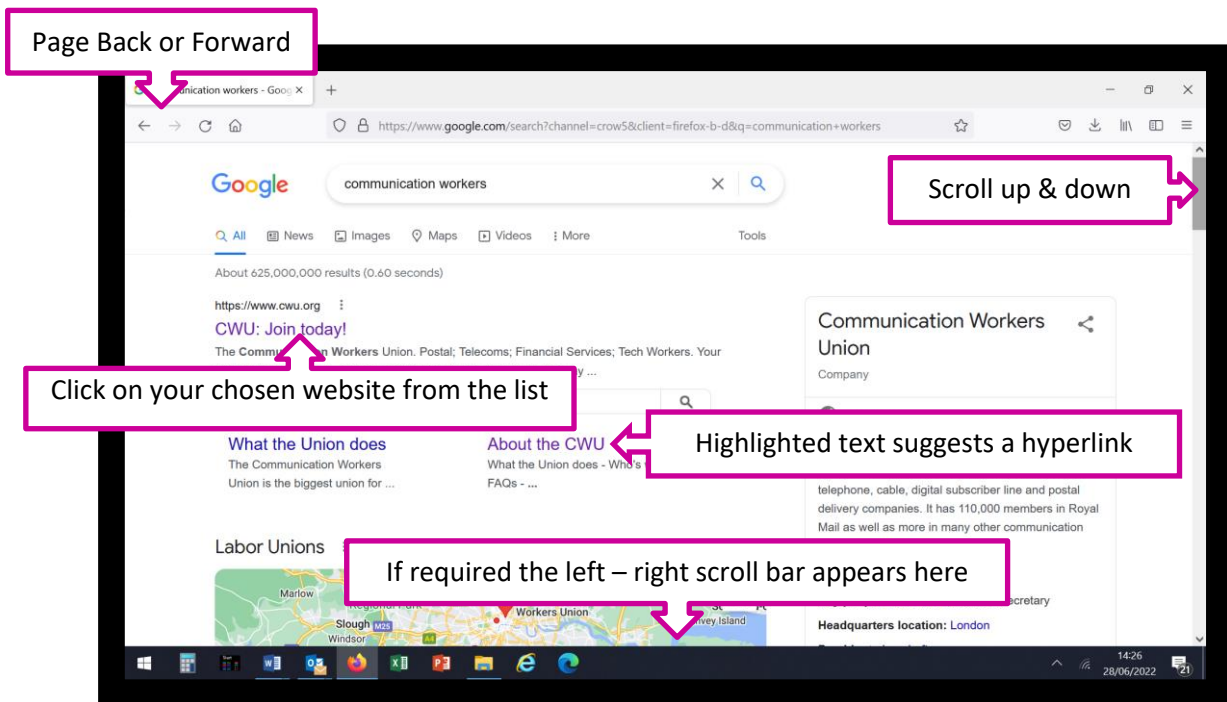
But what if you don't have the full web address or are just looking for something under a general heading? Most web browsers have a built in search engine. Just type in what it is you are looking for into the search box and press the enter key. This will provide you with a list of web pages to choose from.

The results from a search provides you with a list of hyperlinks (or just links). These are shortcuts to other pages and most websites have them, linking to pages either to their own or other people's websites. A hyperlink will either be underlined or highlighted and your cursor will change shape to a pointing finger when you are over it.

If you click a hyperlink you will be taken to a different page or site. It might do this in the same window or tab, in which case you can return via the back arrow on the top left of the screen. Or it might open a new window or tab, in which case it will open over the original window or tab leaving both open. A new window can be closed by clicking the cross in the top right corner. A new tab can be closed by clicking the cross in the corner of the tab. Closing a tab just closes that tab. Closing a window closes all the tabs that might be open within that window.

If a website is well-designed, all this should be self-evident but some websites lack consistency. If the website is not behaving as you would expect, check to see if it has opened a new tab or window. If you close something when you didn't mean to there is the option to restore your previous window(s). Browsers vary but you will probably find a menu which will either offer you the option to restore your last session or to find it in your browsing history.

Webpages are often too long to fit on your screen all at once. You will need to scroll up and down. On the right hand side there is a slider with arrows at both the top and bottom. Click on these arrows to scroll up or down a step at a time or click and drag the slider up or down. If the web page is too wide for your screen a similar scrolling bar will appear at the bottom of the window for you to scroll left or right.



Rather than just looking at information you might want to be more interactive. You might want to buy something from an online shop, participate in an online course, or book an appointment with your GP. In this case your connection will need to be personalised and secure. You will be asked to create an account. This is usually a straightforward online form; name, contact details, payment details, password etc.

Remember this is personal information and needs to be kept secure. We will look at this in more detail in the Cyber Security section but for now, you should remember that the internet is just like any other public space. There is lots of great stuff out there but occasionally you come across someone with malicious intent.

Keeping your wits about you online is as important as doing so in a crowded public space. Check that people are who they say they are; does the web address match their publicity? As in the wider world, people rarely offer you something for free, so maybe it is too good to be true. Many free sites are paid for by advertising, but unlike in the TV this can be tailored to you, based on your internet history.

Some websites might also offer you the option to download, documents or videos etc. They will usually have a button or hyperlink saying “download here” or something similar. Downloads from the internet can contain viruses which could disable your computer, steal your personal data or add unwanted software to your computer. You do not have to worry too much about this but you do need to be cautious. Only download things from trusted sources. Search the web to find some reviews before downloading anything.

The worldwide web was envisaged as democratising access to information and knowledge – and it has. But it has also provided a platform for those who would spread rumour and disinformation. To some extent there has always been rumour and disinformation, but the technology new means it can spread around the world in seconds. Don't be a part of it. Check your sources. Are they reliable? Can they be verified from another site? Are they circular (a small number of papers referencing each other to give the impression of wider proof)?

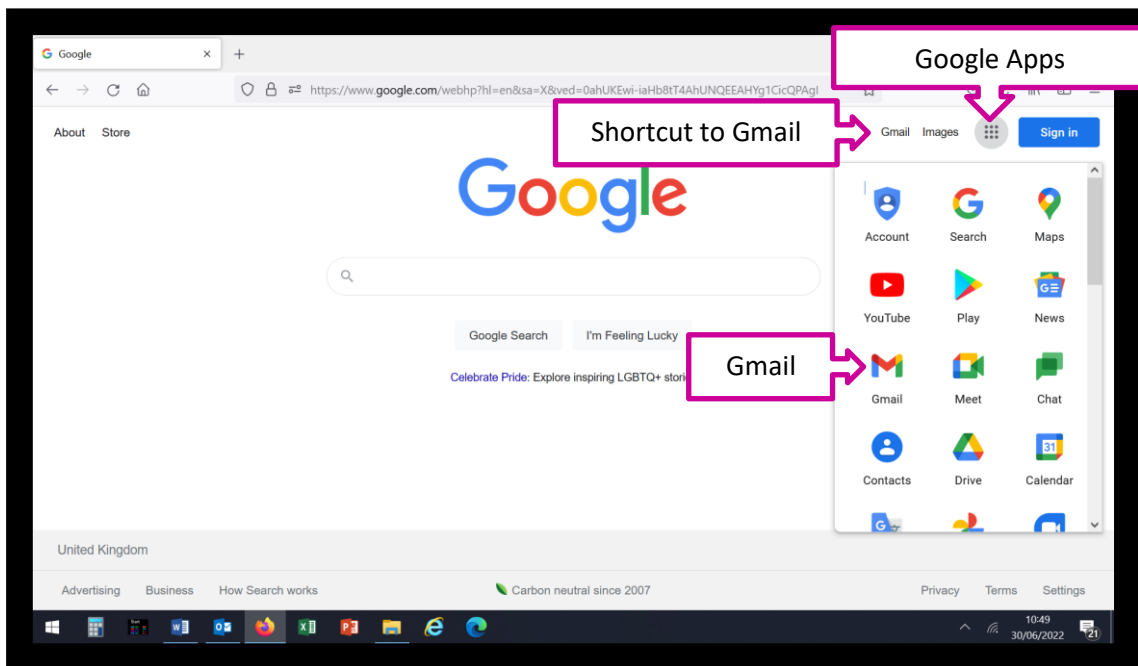
Internet Quiz


Fill in the gaps in the following statements with the words listed below.

- | | |
|------------------|------------------|
| a) Wi-fi | f) Worldwide Web |
| b) Web address | g) Modem |
| c) Search engine | h) Hyperlink |
| d) Internet | i) Web browser |
| e) Window | j) Tabs |

1. The _____ is the global network that allows any computer to communicate with any other computer.
2. The _____ is an information-sharing network built on top of the internet.
3. A _____ converts your internet signal to something that can be carried over your telephone or cable TV network.
4. _____ is the network created by a wireless router to enable devices to connect to the internet. If it is public or unsecured you should not transmit personal data over it.
5. A _____ is the software on your computer that allows you to access the worldwide web.
6. A _____ is the specific way to find a particular website, and will often be prominent in an organisation's publicity material.
7. A _____ enables you to find information on a specific subject or organisation from across the worldwide web.
8. A _____ is a shortcut that when clicked on will take you to a specific web address. You can identify it as it will be highlighted, usually in a different colour font and underlined. Your cursor will change to a pointing finger when you hover over it.
9. When you double click on your web browser icon it will open a new _____ for you to explore the internet. Within it you can open a number of _____ which enables you to have a number of websites open at once.

So what about e-mail? E-mail stands for electronic mail and it is a personal message sent over the internet, directly from one person to another. Most web browser providers will also offer you the opportunity to set up your own personal email account – usually free of charge. Where this is located on the site varies from provider to provider, but it will be somewhere obvious (probably on the top tool ribbon). For Google that is Gmail and it is located among their Google Apps. There is also a shortcut located at the top of the screen,




Sign in
 to continue to Gmail

Email or phone


[Forgot email?](#)

Not your computer? Use a Private Window to sign in.
[Learn more](#)

[Create account](#) [Next](#)

Because it is your own personal account, you need to sign in with your email address and password. When you first set it up you will need to create an account. This is very straightforward.

First you enter your name in the boxes provided. Press the


Create your Google Account
 to continue to Gmail

First name Last name

Username @gmail.com

You can use letters, numbers & periods

Password Confirm

Use 8 or more characters with a mix of letters, numbers & symbols

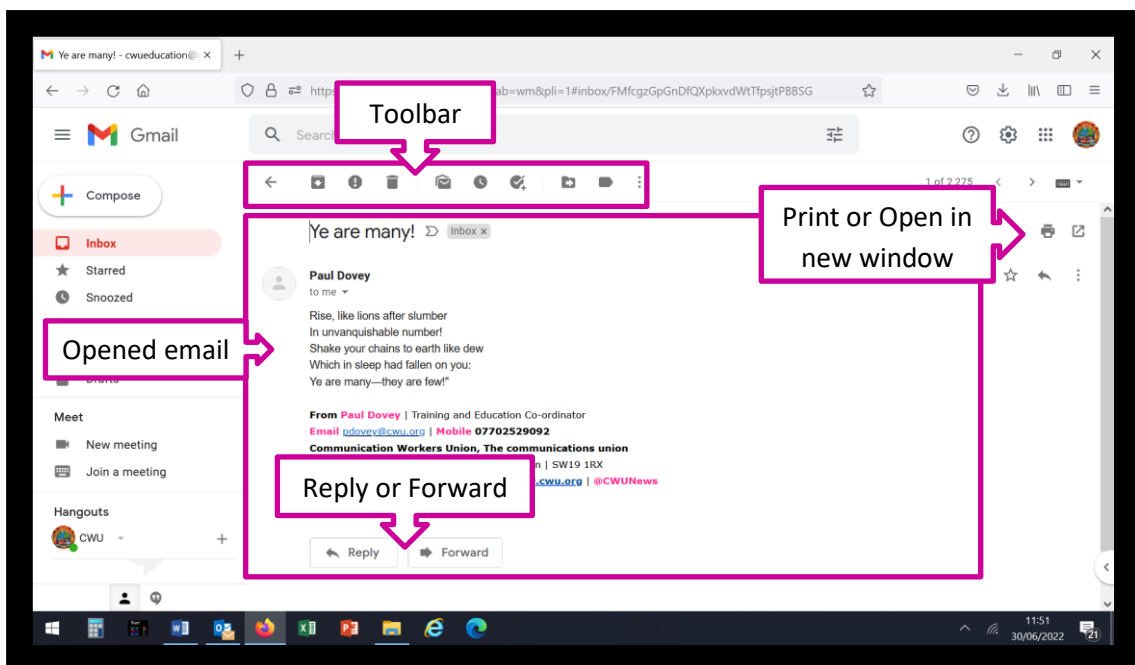
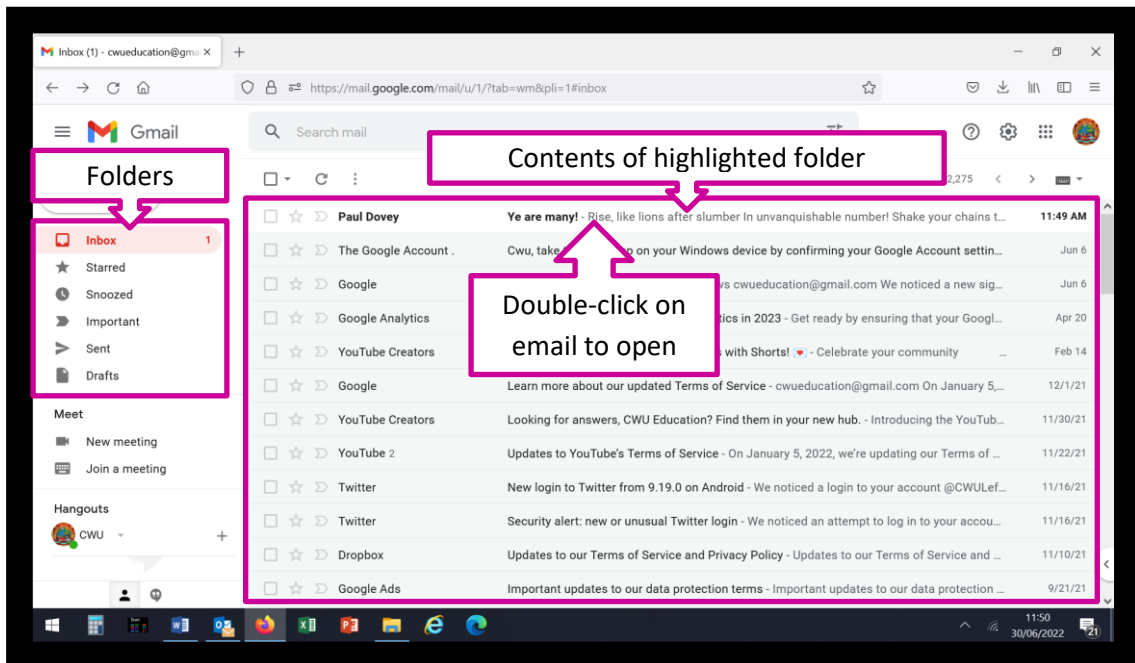
Show password

[Sign in Instead](#) [Next](#)

tab key on your keyboard to quickly move from one text box to the next. Then enter the email address you want. This might be your name or anything else you like – so long as somebody else isn't already using it.

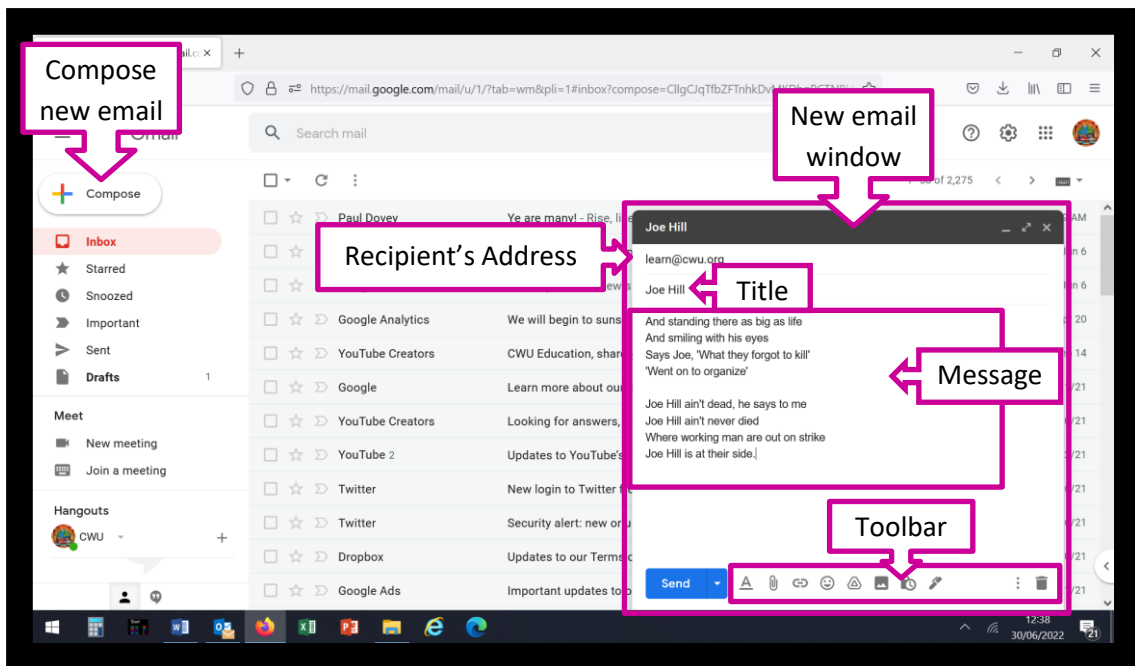
Then add a password. It should be over 8 digits long and a mixture of upper case, lower case, numbers and symbols. Do not use anything as obvious such as a birthday. Ideally you want something fairly random but memorable to you. They will probably also ask for a few more details, such as date of birth and mobile phone number. These will help you to recover your e-mails if you forget your password.

Most e-mail sites look pretty similar. Down the left hand side you will see your folders such as your Inbox (the e-mails you have received), Sent Items (e-mails you have sent), Drafts (e-mails you are working on), Starred or Flagged (e-mails you have marked important) and so on. Whichever folder you click on will be displayed in the centre. To read an e-mail from the list just double-click on it and it will open.

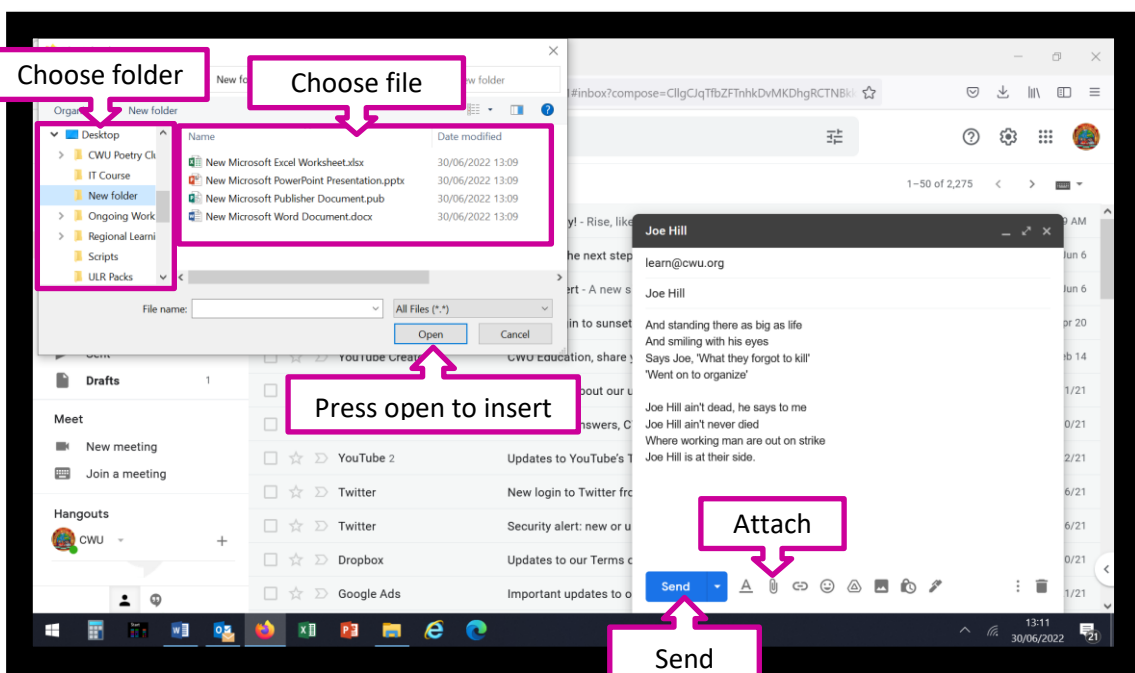


Once you have opened the e-mail you will see the message you have been sent. The toolbar enables you to mark it important, move it to a new folder, delete it or whatever. You can also chose to print it or open it in a new window. If you want to reply to it or forward it to someone else, there are options for you to do this.

Now we can return to the inbox, either using the back arrow or clicking on the inbox link. If we want to compose a new e-mail there is normally a large button marked "compose" or "new email." That opens a new email for us to write.



To send an e-mail to someone you need to know their e-mail address, which you type in where it say either "To" or "Recipient." You should always give your email a title. It lets the recipient what the e-mail is about and, most importantly, allows both you and them to find your e-mail again later. The message is typed in the main body of the window. The toolbar allows you change the font and attach documents or photos etc.



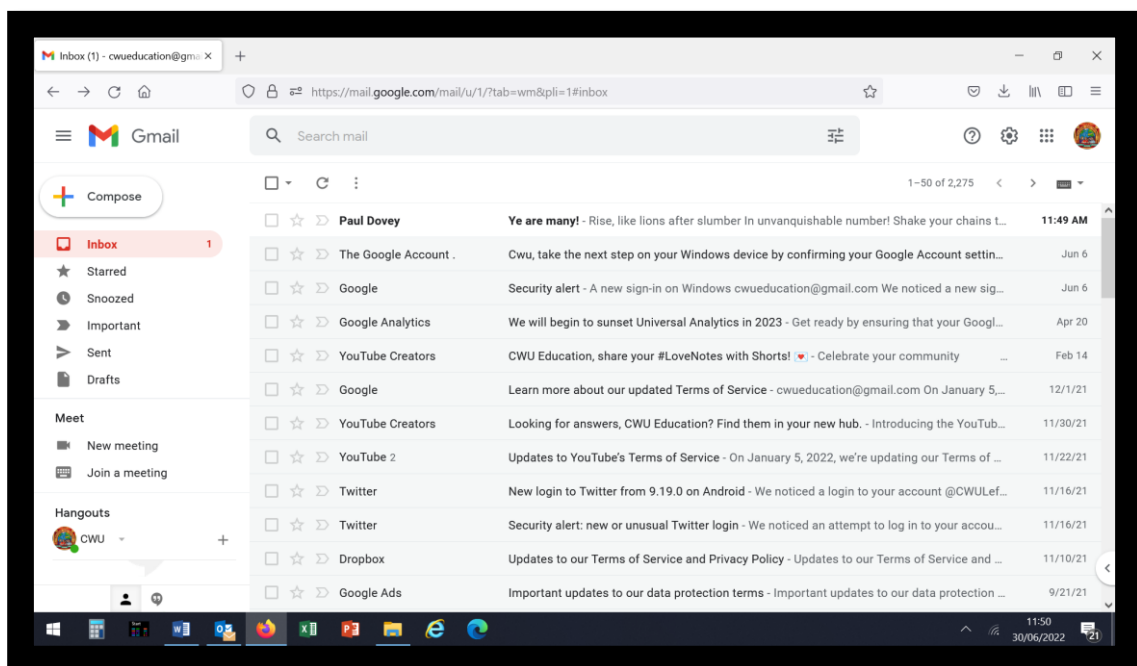
If you want to attach a document click the paperclip icon. It will open the file explorer, from where you can choose any document, by finding the folder on the left hand window, then selecting the file from the right hand window. When you click on Open it attaches the document to the email.

Then just press send. Your email should be in the recipients in box the next time they look at it. You will be able to see it in your sent items folder. Remember, pressing send is the same as dropping a letter into the post box. It is the point of no return! Make sure you are happy to send the e-mail before you press send.

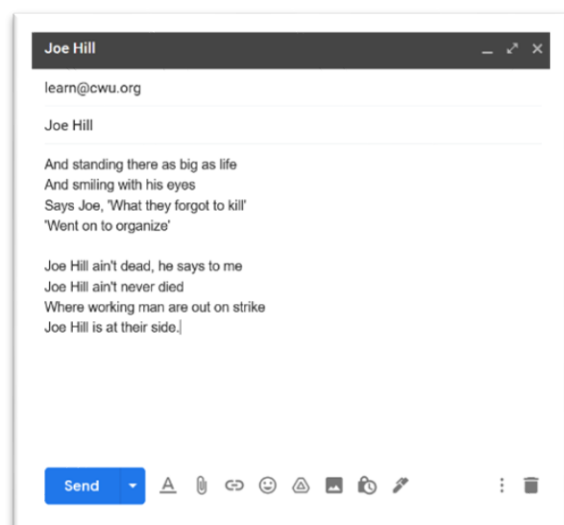
Remember to exercise caution in what you write in an email or on social media. It might seem informal or conversational but it creates a lasting record. An off-the-cuff comment can be interpreted differently to how it was intended. People have been disciplined at work or faced legal action on the basis of what they have written on social media. So treat it with the same respect as you would any public or written communication.

E-mail Quiz

1. E-mail stands for _____ and it is a _____ sent over the _____, directly from one person to another.
2. You can get your own personal email account from most _____.
3. You must have an e-mail programme on your computer in order to access your e-mails. True False
4. On the screenshot below draw the appropriate letter where you would,
 - a) Choose which folder to view
 - b) See the contents of your chosen folder
 - c) Create a new email



5. On the screenshot below, where would you click to do the following?
 - a) Type the recipient's address
 - b) Type your email message
 - c) Add an attachment



Internet Security

As we mentioned earlier, the internet can open up a wide range of opportunities but, as in any public space, you will occasionally come across someone with malicious intent. So it is important to keep your wits about you.

Make sure your devices are protected: Use passwords and lock screens on all your devices.

Make sure your internet connection is secure: Remember, your wi-fi signal will extend beyond your four walls. Make sure your home wi-fi network is password protected. When using a public wi-fi connection you cannot be sure how secure it is (probably not very), so avoid conducting personal transactions such as online banking or online shopping etc. over public networks.

Choose strong passwords: A password is a key to your security. Make sure that key is not easy to forge and don't use the same key for everything. Don't use obvious names, dates or patterns. Use a mixture of letters, symbols and numbers. Ideally chose something random that is difficult to guess but easy for you to remember.

Install antivirus software and keep it up-to-date: There are many reputable brands of antivirus software. You will probably have one pre-installed on your computer, but it might be on a time limited subscription. Make sure you renew it or install an alternative. Some internet providers offer antivirus protection and there are some free options available – but it is worth reading some reviews or asking a computer-savvy friend if you are going to change your antivirus software.

Keep software and operating systems up-to-date: Making sure your software is up-to-date ensures that you have the latest security settings to deal with any threats.

Check that websites are secure and genuine: Look for the padlock icon within the address bar. Look for websites that start with https (secure) rather than just http. Look out for misspelling, out of date or distorted logos, which might have been copied from genuine sites. Most importantly, make sure the web address matches the one advertised on their adverts.

Be careful what you download: Software or apps you download from the internet may contain malware (malicious software). Malware can stealing your personal data or enable unauthorized access to your device. Think carefully before downloading anything onto your device, and only download content from trusted or official sources.

Be careful what you click on: Avoid links from unsolicited emails, online quizzes and click-bait (sensational, often fake news about celebrities, headlines saying “you won't guess what happened next!” free or incredibly cheap offers etc.”). Some of these are designed to harvest your personal data or expose your system to malware.

Beware of scam emails: If you receive an unexpected email from your bank, a service provider or the tax office do not click on any links or attachments. The email will probably try and rush you to respond without thinking, either with a time limited offer or the threat of a large bill or fine if you do not respond immediately. Don't let them panic you. Contact the bank or whoever, through a known genuine phone number or contact. They will be able to tell you whether the request is genuine.

Be careful what you post online: Any comment or image you post online has the potential to stay online forever. Remember it might be seen by relatives and employers. Be careful about disclosing personal information, such as date of birth, address and contact details online. Check your privacy settings on social media. Don't let your personal information become public.

Internet Quiz Answers

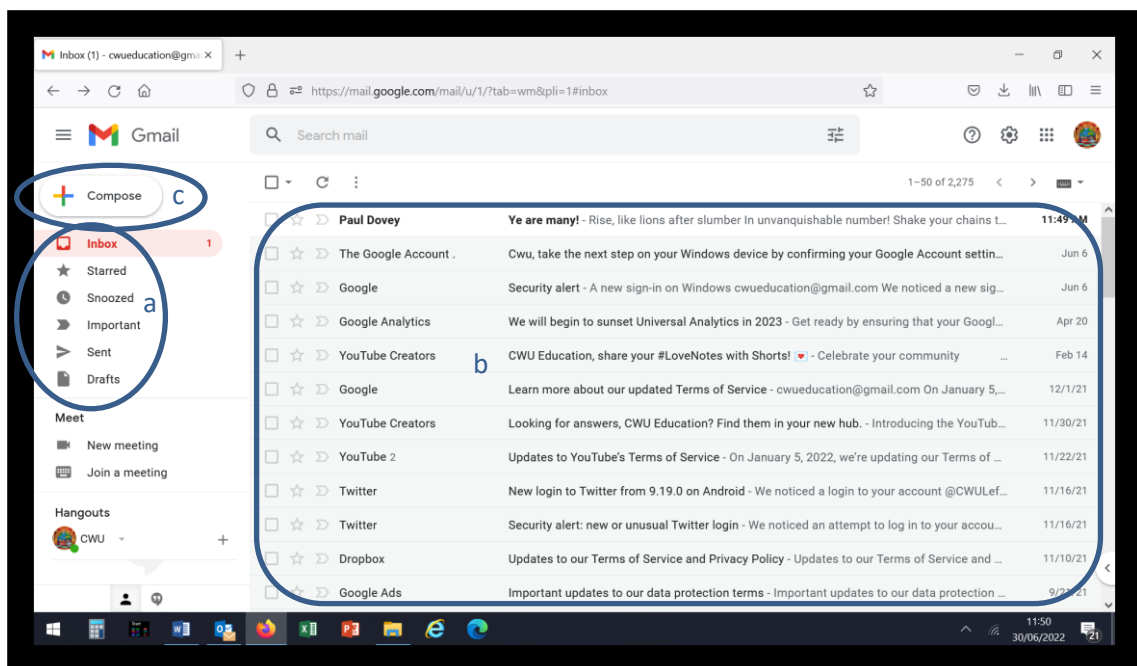
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 - Add an attachment

