

THE
DUSTON
SCHOOL

TDS

4-19

Knowledge Organiser Computing

Year 8 Term 1 E-Safety

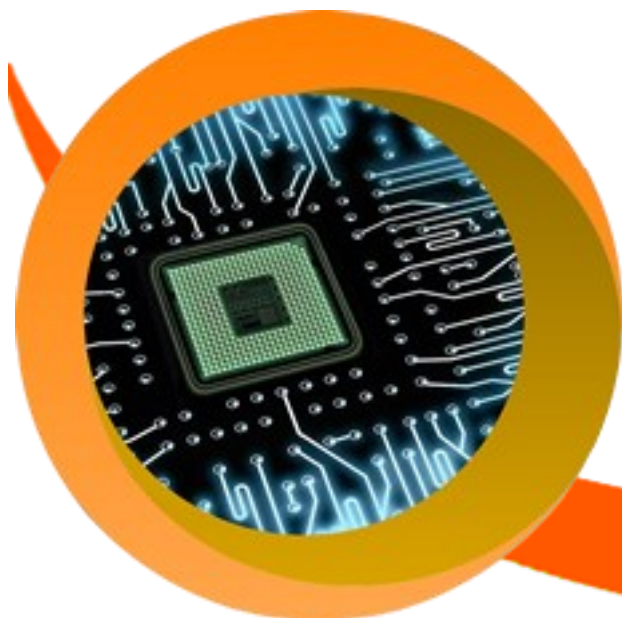


Big Question

What are the dangers of not knowing how to be safe online?

Big questions that will help you answer this enquiry question:

1. What is Computing / How is it different from ICT?
2. How can we keep our digital footprint safe?
3. How can we maximise the strength of a password?
4. Is it possible to spend real money through a smartphone?
5. In what form can our network be threatened?



Keywords

Terminology you need to know!

Keywords:

Digital footprint A trail of data you create while using the Internet. It includes the websites you visit, emails you send, and information you submit to online services.

Personal information can be used to steal your identity and commit fraud. Be wary of anyone who asks for your bank or credit card **details**, and only use secure sites when shopping **online** – secure sites usually carry the green padlock symbol in the address bar.

File sharing is the practice of distributing or providing access to digital media, such as computer programs, multimedia (audio, images and video), documents or electronic books.

Virus A computer program which distributes copies of itself without permission or knowledge of the user. Viruses often hide themselves inside other programs.

Malware Malicious software that is designed to infiltrate or damage a computer system without the owner's informed consent. It includes computer viruses, worms.

Computer worms—

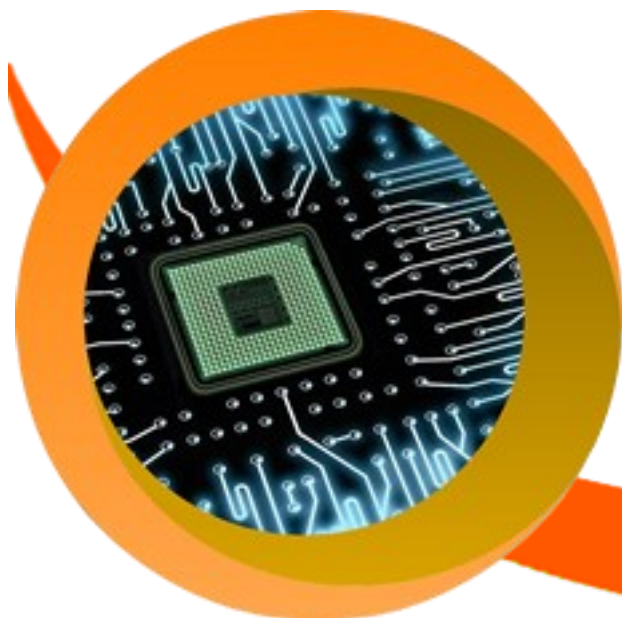
Trojan A computer program that takes control of the computer it is installed upon without the knowledge of the owner and is designed to access or damage sensitive data.

Spyware usually installs itself on the computer and monitors activity in order to send private information to third parties.

Cyberstalking Using information and communication technology, particularly the Internet, to harass an individual, group of individuals or organisation.

Hacking Slang term used to describe illegal access of computer systems by unauthorised users.

Identity Theft The practice of stealing personal details (e.g. name, birth date, credit card number) and using them illegally.



Keywords

Lesson 1 engage task

The image shows a Facebook profile page with a blue header. The profile name is 'Name' and the profile picture is a grey silhouette. The navigation bar includes 'Timeline', 'About', 'Friends', 'Photos', 'Archive', and 'More'. The left sidebar has categories: Intro, About, Likes, Books, Music, Films, TV Programmes, Sports, Friends, and Family. The main content area has a 'Compose Post' section with options for Photo/Video, Live video, and Life Event. Below this are three posts, each starting with 'You Just now' and followed by a text prompt: 'I succeed best in lessons when...', 'I think that Computing/ICT is...', and 'The best part of summer was...'. Each post has 'Like', 'Comment', and 'Share' buttons and a 'Write a comment...' input field.

Fill in the facebook profile with information about you.

Keywords

Lesson 2 engage task



Your Digital Footprint Worksheet

Worksheet Activity 1:
How can a picture go round the world?



1. On the map, find the UK, Spain, Italy, Canada, Argentina, Mexico, Brazil, Australia, Madagascar and Russia, and colour them in.

2. Read the story below and draw lines on your map where Ellie's picture travels round the world on the internet in a space of 24 hours:

Ellie, who lives in London, sends a photo of herself on social media to her cousin in Spain. Sophia sends the picture to Adeb in Canada and Bella in Italy. Adeb in Canada sends the picture to Juan in Mexico and Felipe in Brazil. Bella in Italy sends the picture to Catalin in Argentina and Vladimir in Russia. Juan in Mexico sends one picture to Lucas in Australia. Vladimir in Russia sends the photo to Alex in Madagascar. Lucas in Australia sends the picture to Ruby in London.

3. How many people have seen Ellie's photo in 24 hours?

.....

If this many people have seen Ellie's photo in 24 hours, how many could see it in a week?

.....

Ellie's photo has gone viral.

Keywords

Lesson 3 engage task

What can you install on your computer to ensure it is safe?

Why would you not purchase a second hand memory stick / pen ?

How can you report content that you are worried about?

Explain the dangers of downloading from file sharing sites?

Keywords

Lesson 4 engage task

Name three ways you can make a password stronger?

Name a disadvantage of having a weak password?

What should do if you get an email from someone you do not know?

When using social media sites how old should you be? And is it sensible to share personal information online (address, school, age etc.) WHY?

Should you give out your password? Even if it is to a friend? Why/why not?

Keywords

Lesson 5 engage task

Aaisha and her friends have all been playing a free game called Globe Ball. As you play the game, you earn points. There are new levels and features the further you go. Aaisha is way ahead of her friends and she is rather sad when she realises she is playing the last level. Luckily, when she completes the level she is really pleased to find out that there are bonus levels.

On the screen it says "Want to go to the bonus levels? 5 GBP for the next level." Aaisha has lots of points on Globe Ball so she clicks on the BUY button. She starts playing but notices that she has not lost any points. Aaisha thinks that there is a problem with the game and keeps on playing and buying new levels. The next day she tries to make a call but her phone has no credit, even though she only topped up 3 days ago.

What do you think has happened?

What should Aaisha do now?

What should Aaisha do in the future?

Knowledge

What are the dangers of not knowing how to be safe online?

Gaming

What's the big deal?

Do you enjoy playing games online? Chances are, if you don't, you know somebody who does. The gaming industry is huge! Did you know that around the world, more money is spent on games than on the film industry?

Multiplayer magic

With the internet, it is now possible to play with dozens, even hundreds of people at the same time through online games like World of Warcraft, Clash of Clans or gaming portals like Miniclip.

Being able to game with people all over the world makes online gaming even more exciting and with the ability to 'chat' in these games, it is easy to 'make friends' with the people you play with.

Just like in the real world though, you need to be careful when playing with strangers. Some people you meet online may not be very nice!

Are you worried about someone you've met in an online game?

Is someone being weird with you in a game? Talk to an adult you trust or get help from CEOP .

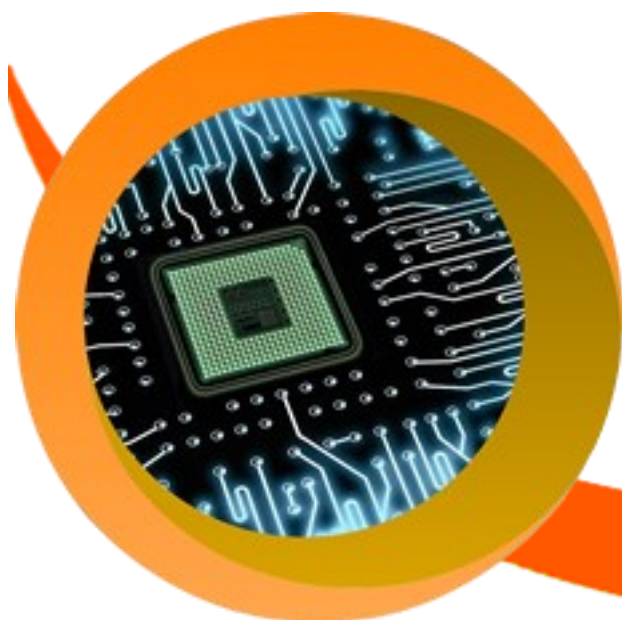
Report it!

CEOP helps young people who are being sexually abused or are worried that someone they've met is trying to abuse them.

If you've met someone online, or face to face, and they are putting you under pressure to have sex or making you feel uncomfortable you should report to CEOP.

This might be someone:

- Making you have sex when you don't want to
 - Chatting about sex online
 - Asking you to meet up face to face if you've only met them online
 - Asking you to do sexual things on webcam
 - Asking for sexual pictures of you
 - Making you feel worried, anxious or unsafe
- If this is happening to you, or you're worried that it might be, you can report this to CEOP.



Knowledge

What are the dangers of not knowing how to be safe online?

5 things to look out for

It's easy to lie online and some of these 'online friends' may be adults who want to hurt you. How can you tell?

1

They will try to gain your trust and 'make friends' with you.

They build this trust by making you think they have things in common with you - like hobbies or the game that you're playing with them.

2

They might try to get you to do things,

like add them on a social network, give them your phone number, send them photos or chat on webcam. This can get very difficult if they talk about things which make you uncomfortable or ask you to do things you don't want to do.

3

They might offer to tell you 'cheats' to help you out with a game.

If they ask for something in return, think about why they are doing this - are they a 'real' friend or trying to build your trust - be alert!

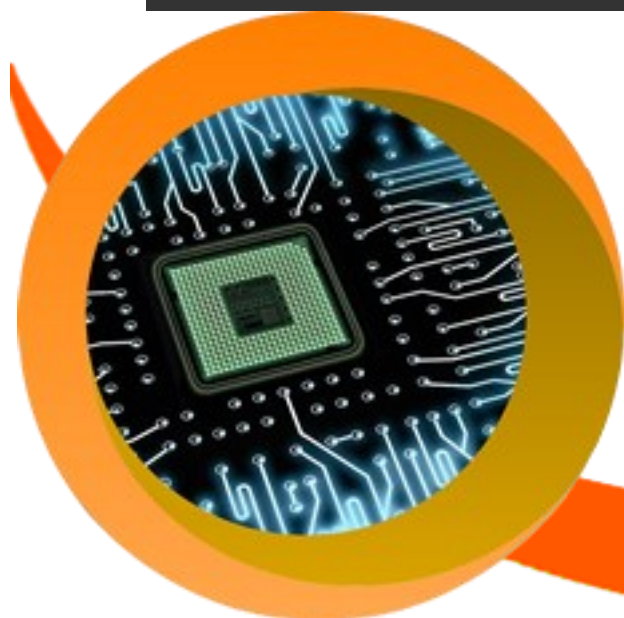
4

Remember, if they share a link with you it could be a computer virus or spyware, which tells the person your personal information without you knowing - be careful and don't click on links from people you don't know! [Find out more](#)

5

They may encourage you to tell them personal information

such as where you live and what school you go to. This is part of their attempt to get your trust and will tell them how to find you in the real world.



Knowledge

What are the dangers of not knowing how to be safe online?

Online Bullying

Lock up your loot

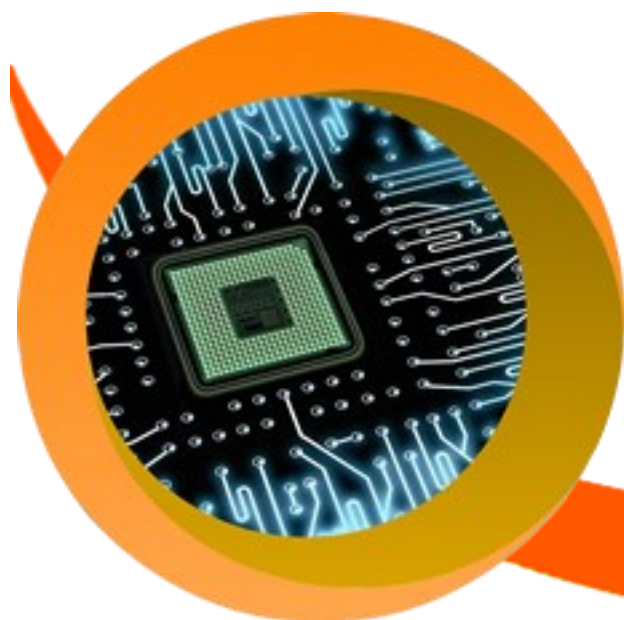
Just as you wouldn't leave your front door or windows open, you shouldn't leave your computer or phone unlocked.

Your computer, tablet and phone hold loads of information about you. Your name, address, birthday, a list of your friends, hobbies, text messages, private photos and videos. What else might be on there? All of this is personal information which you need to keep secure. It's valuable to you and to criminals. Make sure you keep it locked up!

Top 5 crimes online

There are lots of ways that people try to steal personal information and cause trouble online. Here are the top five:

- 1 Hacking.**
Hackers try to break into other people's computers to steal personal information, files or cause trouble.
- 2 Phishing.**
Criminals set up fake websites which look like real websites, like Facebook or a bank. They send emails pretending to be from that site saying you need to update your details. If you click on the link in the email, it takes you to the fake site. If you enter your details, hey presto, they've got your password and can take over your account.
- 3 Viruses and malware.**
Viruses are 'malware' - nasty pieces of software that can mess up your computer, delete files or make your screen freeze. Once your computer is infected, viruses then try to spread to other computers, often by email. Criminals also use malware like 'Trojans' to get access to computers and make trouble.
- 4 Rattng.**
RATs are 'Remote Access Trojans'. A Trojan is software which is put on your computer without you knowing it. Remote Access means criminals can take control of your computer, spy on your private files, delete stuff and even turn on your webcam!
- 5 Clickjacking.**
Criminals try to get people to click on links which download viruses, RATs or other malware by making the links look interesting. The link might advertise a funny video with a caption like 'OMG! You won't believe what this girl did' or say 'Click for a free iPod'. Don't click on links from people you don't recognise or seem too good to be true!



Knowledge

Digital Footprint and online safety.

5 ways to keep your secret stuff secret!

Though there are criminals who might try to steal your stuff it's easy to protect your computer. Here are five things you should always do:

1**Set strong passwords!**

Your password is like the keys to your house. You should use a different one for each site you use and make sure it's a mix of letters, numbers and symbols. Don't use ones which are easy to guess, like QWERTY, 123456 or Password!!

2**Check URLs.**

The URL is the address of the website. You can find it in the address bar at the top of the page. The url for Thinkuknow is - <http://www.thinkuknow.co.uk> - can you see it on this page? When you click a link you should always check the URL is the one you would expect for the site before you enter any details.

3**Don't click on links from people you don't know.**

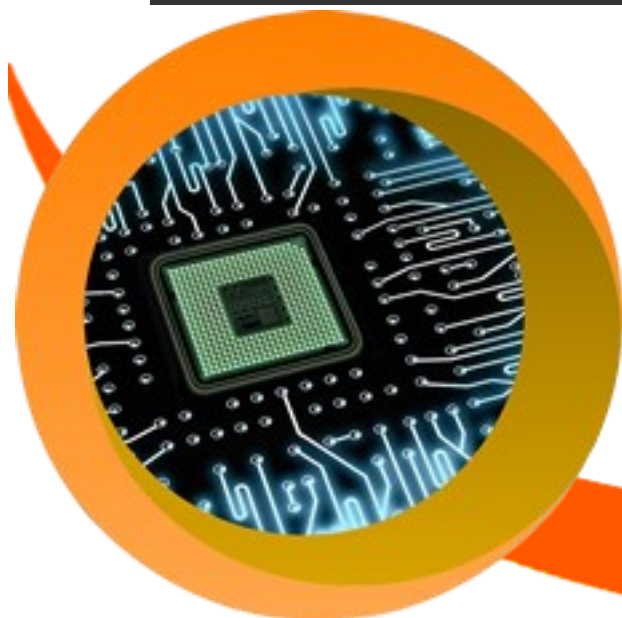
These could take you to phishing sites or download viruses or malware onto your computer. Never enter your details into a site you're not sure about – even if the link has come from a friend.

4**Always use antivirus software.**

If you've got your own computer make sure you get anti-virus software. If your parent or carer bought it for you ask them to make sure you've got one installed. They can find out more at [Get Safe Online](#)

5**Treat your password like your toothbrush and lock your phone!**

Don't share your password, even with your best friend! If you share your password or leave a phone or computer unlocked then someone else could access any accounts you haven't logged out of. They could spread rumours about you, say nasty things about other people and get you in trouble. They could pretend to be you!



Homework due

Revise the spelling and definitions for the below:

1. **Digital footprint** A trail of data you create while using the Internet.
2. **Personal information** - Information that is private to you. E.g Date of birth / Address
3. **File sharing** is the practice of distributing or providing access to digital media
4. **Virus** A computer program which distributes copies of itself without permission or knowledge of the user.
5. **Malware** Malicious software that is designed to infiltrate or damage a computer system without the owner's informed consent.
6. **Trojan** A computer program that takes control of the computer it is installed upon without the knowledge of the owner and is designed to access or damage sensitive data.
7. **Spyware** installs itself on the computer and monitors activity in order to send private information to third parties.
8. **Cyberstalking** Using information and communication technology, particularly the Internet, to harass an individual, group of individuals or organisation.
9. **Hacking** Illegal access of computer systems by unauthorised users.
10. **Identity Theft** The practice of stealing personal details (e.g. name, birth date, credit card number) and using them illegally.

Homework

Spelling

Homework test for spellings and definitions

Revise the spelling and definitions for the below:

1. .

2. .

3. .

4. .

5. .

6. .

7. .

8. .

9. .

10. .

Homework

What are the dangers of not knowing how to be safe online?

Homework due

Answer the following questions. Write your answers on an A4 page.

1. What is a computer virus?
2. In some ways a computer virus is similar to viruses that give you coughs and colds. Why might that be?
3. Do computer viruses damage the actual computer equipment?
4. What harm can computer viruses cause?
5. How is it possible to introduce a computer virus to your computer?
6. If you receive an email with links, what questions should you ask yourself before opening it?
7. How could you know if your computer had a virus?
8. If you do get a virus on your computer, what steps can you take to remove it?

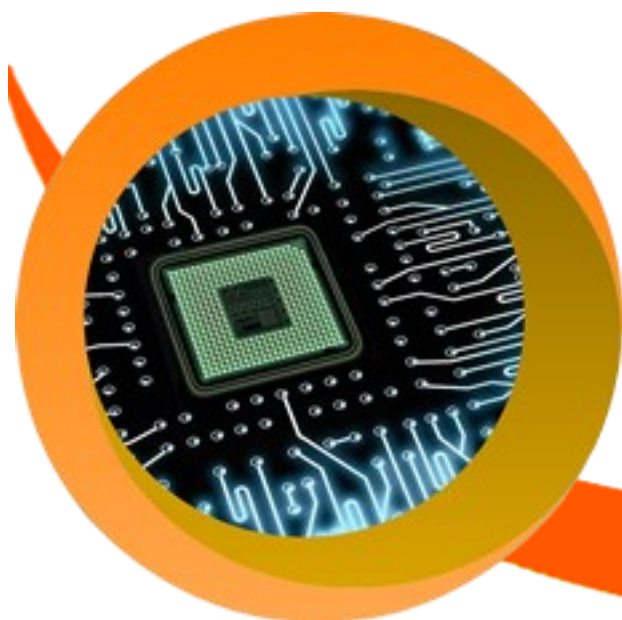
Homework

What are the dangers of not knowing how to be safe online?

Homework due

Internet Safety Worksheet

| Rule | What might happen if you don't follow the rule |
|-----------------------------------|---|
| Don't give out your email address | Someone might try to send you mean or rude pictures |
| Don't give out your real name | |
| | |
| | |
| | |
| | |
| | |
| | |



Wider Reading List

Websites and books for further information.

Websites:

Games

<http://www.kidsmart.org.uk/games/>

Viruses and Spyware

<https://www.getsafeonline.org/protecting-your-computer/viruses-and-spyware/>

Chat Online

<http://www.kidsmart.org.uk/chat/>

Book:

Computer Viruses for Dummies by Peter Gregory

