

Networks

Topic aims:

- *To understand the purpose of networks*
- *Advantages and disadvantages of networks*
- *Hardware needed to create a network*
- *The origin of the internet*

[\[Video tutorial\]](#) (only if you miss the lesson!)

Log-ins:

ict_media:

- Username: **ict_media**
- Password: **ict1331**

Teach-ICT [click here:](#)

- Username: **sw139qn**
- Password: **register3**

Watch Captain Network Part 1! [Click here for Teach-ICT](#)

- **Task 1: What is a computer network?**
 - In your **Google Slides, Computing Notes**: Title: Networks
 - Captain Network will explain everything!
 - Answer in 1 full sentence: ***What is a computer network?***
 - Write down: 3 **advantages** & 3 **disadvantages** of networks.

- **Task 2: Start your video**

[Tips: [Step by Step](#)]

[Tutorial video: [How to use iMovie](#)]

- Open iMovie (search using Spotlight: **only on ict_media login**)
- Start your movie (not “trailer”) by adding images to **Script 1**.
 - The images must be **relevant** to networks: aim for 5 or 6 which show what the script is talking about!5

Watch Captain Network Part 2! Then do quiz: [Click here for Teach-ICT](#)

- **Task 3: Network hardware**
 - Learn from your hero, Captain Network!
- **Task 4: Quiz**

- Do the **quiz** about **network hardware**:
 - **NICs, hubs, switches and routers**
 - Show me you have achieved the **pass mark of 75%**!
- **Task 5: Network hardware: script 2**
 - Continue your movie by adding appropriate images to go with **Script 2**.

Watch the **information video**: [Click here: skip Lesson 3 Task 1; go to Task 2](#)

- **Task 6:**

Google Slides: Title: **My Networks Script: The Start of the Internet!**

- **Create “Script 3”**, in the style of the first 2, which answers the following questions:
 1. **What is the Internet?**
(clue: *many LANS joined together*)
 2. **How did the internet begin?**
(clue: *1969; “The Arpanet”*)
 3. **Who was Vint Cerf?**
(clue: *he developed “protocols” to allow communication over the Internet*)
 4. **What is a protocol?**
 5. **What is the World Wide Web?**
- **Record**
Record your audio clip, from your script, **for homework**. Use *Voice Memos* and upload to your *Google Drive*. (You do not need to find pictures at home).

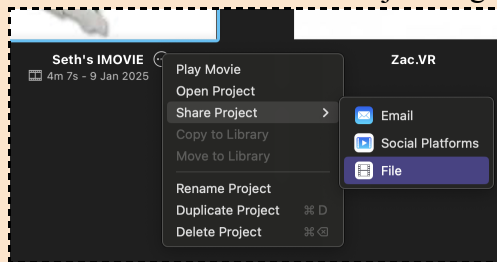
[Tutorial video: [How to record a sound clip at home](#)]

- **Add**
Add your audio clip with some chosen images, into your iMove project.
- **Extension Task**
 - **Music!**
You could make a soundtrack in *GarageBand* to play behind your voice!

- **Finish video**

- **Embed your finished video into your Slides**

- i. From the iMovie “Project Page”, you can choose to *Share Project > File*



- ii. Once you have a file (it may save to “Documents”: look in *Finder*), drag and drop it into *Google Drive*.

- iii. Now go to Google Slides and you can *Insert > Video* from Google Drive and it will embed in a slide.

Google Slides: Title: Networks Video



Homework! **These words will come up in the next test!**

Network	Two or more computers connected together for the purposes of sharing data or resources.
Node	Any device on a network.
LAN (Local Area Network)	A network which covers a small geographic area, such as a school.
Server	A central host computer offering resources, such as a web page or music files, via a network.
Router	A device which connects two or more different networks together and routes data between them.
Hub	Connects devices to a central point.
Switch	Connects devices centrally in a LAN and sends data to the requesting device.
NIC (Network Interface Card)	A component within a computer or other node which allows it to connect to a network.
Wireless Access Point (WAP)	A device which allows nodes to connect wirelessly to a network.
The Internet	A global network of connected devices.
The World Wide Web (WWW)	A service which provides pages of information, accessed via the Internet, using a web browser.
Network protocol	An agreed set of rules for formatting data for communication between devices.

URL (Uniform Resource Locator)	A web address: a human readable name given to web pages, consisting of the protocol, the domain name and the path.
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