COMPUTING SYSTEMS AND NETWORKS KNOWLEDGE ORGANISER

Overview

Systems

-You should also know that Information technology (I.T.) includes computers and things that work with computers.

-You should also know that computers have Input, Process and Output (IPO) components.

-Computer systems are built using a number of parts.

-Computer systems can communicate with other devices.

-There are many, many different kinds of computer

Transferring Information

Protocols and Packets

-Protocols are an agreed way of doing something. When we communicate, we use an agreed set of protocols (greeting, speaking, listening, etc.).

-In computing, agreed protocols are the way that computers communicate with one another.

-The digital information they send is

IP Addresses

-Computers and their users are not always in the same place as one another.

-With billions of computers around the world, computers need to send the information to the correct place.

-To do this, computers use special addresses called IP addr_____ look like this:

From: 216, 58, 1, 214

My IP Address
63.255.173.183

Systems

-Systems are a set of things working together as parts of a whole.
-Computer systems are made up of inputs (something that sends a message to the device), processes (the way the device acts on the message) and outputs (something that is sent out by the device). Below are some examples.

Washing Machine:	DVD Player:	Smart Locker:
Input: Dials and buttons.	Input: The disc is inserted and play is pressed on the remote.	Input: The customer scans in a barcode.
Process: The computer inside follows a program.	Process: The system reads the information on the disc	Process: The code is recognised by the system.
Output: The clothes are washed and the display shows the remaining	Output: The screen dis_____ie/	Output: The correct locker is opened.

Working Together

-Collaborating is another word for working together on something, to reach a shared goal.

-The internet can be used to help people collaborate online, even when they are a long distance apart!

-'Chat' functions can be used keep each other updated with new information.

-Shared 'cloud' spaces and online drives can allow one or more person to have access to/ edit documents.

-When building upon someone else's work, you need to be aware of copyright and intellectual property rules.

Important Vocabulary

System	Input	Process	Output	Protocol	IP Address	Packet	Reuse	Explore	Collaboration