

4 The internet – Part 1

Name: _____ Class: _____ Date: _____

Recall

You use the internet every day:

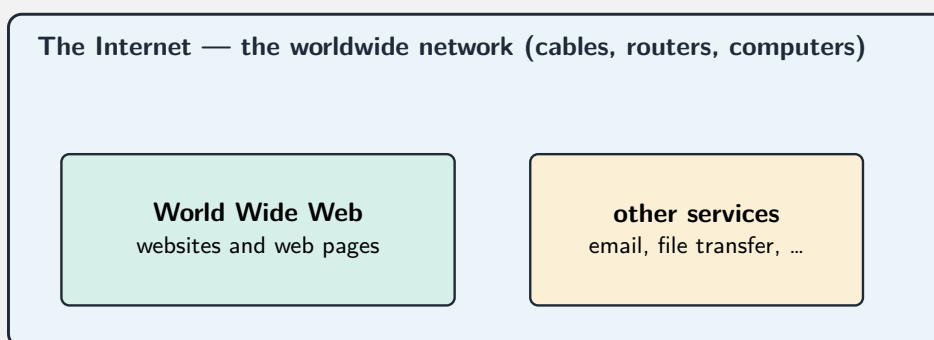
- Websites, messages, and videos all travel over the internet.
- The internet connects computers all over the world.
- Somehow your message reaches exactly the right place.

This sheet lines up how the internet works. Each idea has a worked example.

New ideas

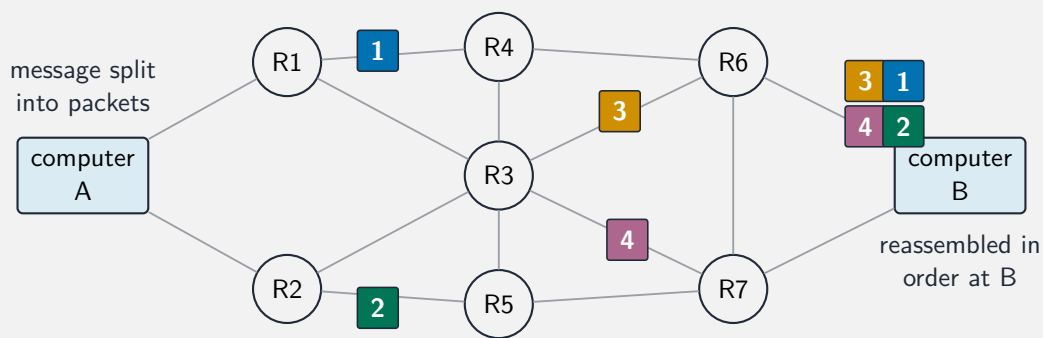
■ 1 The internet

The **internet** is a global **network of networks**. The **web** (websites) is just **one service** that runs on it –along with email, video calls, and more.



■ 2 Packets

Data is broken into small **packets** that are sent separately and reassembled at the destination.



■ 3 Protocols

A **protocol** is an agreed set of rules for communication –like a shared language that lets different computers understand each other.

■ 4 Fault tolerance

Because there are **many** possible paths between two points, if one path fails, packets take another. This makes the internet **fault-tolerant** –it keeps working even when parts break.

Watch out: the **internet** and the **web** are not the same thing. The internet is the worldwide network of connections; the web is just one of the services that runs on top of it.

Practice

Try these in order. The methods are all above.

2.1 State the difference between the internet and the web. [2]

2.2 State what a packet is. [2]

2.3 State what a protocol is. [2]

2.4 Explain why the internet keeps working even when one connection fails. [2]

2.5 State what "fault-tolerant" means.

[1]