

# Ch 10. Network

## Section 3. Network history & network range and speed



# Learning objectives

- Talk about the history of network.
- Use the suitable vocabularies when talking about network speeds and ranges.
- Use simple past tense correctly in a sentence.



# Act. 1: Do you know a piece of history of network?

What do you know about the history of networking?

Match the following (1 - 4) & (a-d)

- 1 The creation of the World Wide Web
- 2 The start of Facebook
- 3 The launch of Twitter
- 4 The beginning of MySpace

- a) 2006
- b) 1990
- c) 2003
- d) 2004

What social networks that you use?  
How much time do spend on them?



# Act. 2: Reading

'I left school in Cambridge in the UK at the age of 18 and went straight to the University of Bristol to study computing in 2000. I graduated in 2004 and decided to travel around the world for a year.

In 2006 I got a job back in Cambridge with the software company Arm. I stayed with Arm for two years and then went to work for Microsoft in Seattle in the USA. This is where I am now and I love it!'



## Questions:

1. When did Karl go to university? .....
2. When did he leave university? .....
3. What did he do after university? .....
4. Where did Karl go in 2006? .....
5. When did he go to Seattle? .....





# Act. 3.1: Simple past tense

## Past simple (1)

We use the **past simple** tense to talk about finished actions in the past.

*When did I/she/he/we/they create the network?  
She **created** the network in December 2008.  
I **started** the network last year.*

Time expressions

*I looked at that **yesterday**.  
I had broadband connected **three days/a month/two years ago**.  
I used that system **last week/year/month**.  
I started that user group **on Monday/in June/in 2001**.*

Use **simple past tense** to talk about one particular experience that happened to you last week.



# Act. 3.2: Simple past tense

## Past simple (2)

<b>Regular</b> past tense endings	<i>look</i>	<b><i>looked</i></b>
	<i>use</i>	<b><i>used</i></b>
	<i>install</i>	<b><i>installed</i></b>
	<i>connect</i>	<b><i>connected</i></b>
	<i>work</i>	<b><i>worked</i></b>
<b>Irregular</b> past tense endings	<i>set up</i>	<b><i>set up</i></b>
	<i>go</i>	<b><i>went</i></b>
	<i>see</i>	<b><i>saw</i></b>
	<i>do</i>	<b><i>did</i></b>
	<i>buy</i>	<b><i>bought</i></b>
	<i>be</i>	<b><i>was</i></b>

Create two sentences using the irregular verbs in the table.



# Act. 4: Listening

## Recording 6.39

Complete the missing words

Karoline: How do you describe network speed?

Sam: In bits, kilobits, megabits and gigabits. They describe network speed. For example, dial-up connections allow (1) \_\_\_\_\_ kilobits per second and DSL from (2) \_\_\_\_\_ kilobits per second to (3) \_\_\_\_\_ megabits per second.

Karoline: OK. I've got that. What about the range?

Sam: Range is the distance of network coverage, so distance units represent network range. Most countries use metric but some use feet as units of measurement. Metres or feet usually describe the range of a network. Home networking routers support a range up to (4) \_\_\_\_\_ feet or (5) \_\_\_\_\_ metres indoors and (6) \_\_\_\_\_ feet or (7) \_\_\_\_\_ metres outdoors.

Karoline: Thanks.



# Act. 5.1: Reading

Read the following text carefully!

## Range

Wireless networks have limited range. Network range depends on the type of 802.11 protocol, strength of the device transmitter and the architecture of the surrounding area. Some structures, such as walls and metal frames, reduce the range of a WLAN by 25%. However, users can extend the range of a WLAN. Repeaters forward the wireless signal to access points or routers and increase the range of a network.

## Speed

Bandwidth and latency are the measures of computer network speed, or data transfer rate. Bandwidth is the maximum throughput of data in bits per second. Some modems support 100 Gbit/s but speed depends on the hardware and software used. Latency is the delay that network creates during the transfer data. Users have no, or very little, control over bandwidth and latency.



# Act. 5.1: Reading

## Questions:

- How many things does network range depend on?
- What can reduce network range?
- What can improve network range?
- What two things affect speed?

Practice the following yourself!

1	77 kilobits per second
2	5 megabits a second
3	2 gigabits per minute
4	250 metres
5	40 feet

1	156 feet
2	12 kbit/s
3	4 Gbit/m

4	7,000 metres
5	95 Mbit/s
6	65 Mbit/s

