

# The Story of the Internet

## Book key

- 1 Open answers
- 2 a expert  
b armed forces, corporation, firm  
c browse, surf  
d download  
e research
- 3 a few b in America
- 4 a boat; car  
b an enormous; a little  
c aeroplanes; platforms
- 5 The USA was worried that its enemy, Russia, was more scientifically and technologically advanced. This could be dangerous for America. The US president created a new government organization (ARPA), where leading scientists could work on scientific and technological developments for the USA.
- 6 Open answers
- 7 a stopped working  
b type in your password  
c the machine, not the software  
d started a program and let it do its job  
e a big powerful computer that many people can use at the same time  
f place
- 8 a X b ✓ c X d X e ✓
- 9 a He was a scientist studying the brain.  
b The computers could not talk to each other.  
c A million dollars.
- 10–11 Open answers
- 12 a inner London  
b a research student  
c a distant planet  
d a security guard  
e a digital watch
- 13 a e-mail / electronic mail  
b spider  
c 1973
- 14 a It was saving money. People could connect on the network instead of buying new computers.  
b People used it to chat by sending each other e-mail.  
c They wanted to find a way of connecting different networks to make one big network.
- 15–16 Open answers
- 17 a Yale; Harvard  
b calculator; computer  
c job; hobby
- d hardware; software  
e many; few  
f Microsoft; IBM
- 18 a The owner of MITS, the company that made the Altair, the first personal computer  
b They were students at Harvard University. They wrote the BASIC program for the Altair and started a company called Microsoft.  
c He was a young computer engineer. He designed and built the first Apple computer, which was more efficient than the Altair and easier for non-technical people to use.  
d A club for people interested in computers. The members exchanged information, ideas and computer parts. This helped Wozniak to build the first Apple computer.  
e A friend of Steve Wozniak. He persuaded Woz to form a company with him to build and sell Apple computers, and he built up the company.  
f The inventor of VisiCalc, the first electronic spreadsheet, and the first serious business program for a personal computer.  
g Worked for IBM and managed the building of the first IBM personal computer, which used Microsoft's operating system.
- 19 Open answer
- 20 a chip b web c browse d spreadsheet  
e text f matter
- 21 a X b ✓ c ✓ d X e ✓
- 22 It allowed people to make links between documents.
- 23 The original meaning is to look through parts of one or more books or newspapers hoping that some of them will be interesting.  
Netscape and Internet Explorer are two well-known web browsers.
- 24 a October 1989  
b HTML  
c Netscape Communications
- 25–27 Open answers
- 28 a ✓ b X c X d ✓ e X
- 29 The Internet was built with government money, so it belonged to the government.
- 30 (1) Users did not have to type commands to follow hypertext links. Users could just point to them to follow the links.  
(2) Mosaic could show pictures.
- 31 Open answers

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- 32 a 23  
b The United States government  
c The New York Times  
d Silicon Valley  
e The programme stops working.

33 Open answers

34–35 Open answers

- 36 a program  
b categories  
c fourteen  
d at first  
e \$850,000,000

37–39 Open answers

40 a ✗ b ✓ c ✓ d ✗ e ✓

41–53 Open answers

### Discussion activities key

1–2 Open answers

3 Student A

Sputnik was launched by the USSR on 4 October 1957

The US president in the 1950s was Eisenhower

Sputnik crossed the American skies every ninety-six minutes

ARPA stood for Advanced Research Project Agency

Ray Tomlinson was responsible for the use of the '@' symbol in messages

Bob Cart worked with Vint Cerf to find a way to connect different networks

Student B

NASA stands for the National Aeronautics and Space Administration

Bob Taylor was in charge of APRA

IMP's worked as translators for the computers on the network

IMP stands for Interface Message Processor

The network in Hawaii used radio waves to communicate over mountains

In 1975 the computer industry was dominated by IBM

4–19 Open answers

### Activity worksheets key

- 1 a Sputnik was launched.  
b ARPA was founded.  
c Bob Taylor started working on the idea of a network.  
d Larry Roberts wrote to 140 companies asking for bids to build a network.

- e Neil Armstrong walked on the moon.  
f The IMP's were connected to two mainframes and the first message was sent on the network.

2 a Bob Taylor

b Larry Roberts

c Dwight D Eisenhower

d Wes Clark

3 a ARPA was set up to the government's high technology work including space exploration. NASA took over the space exploration later, and ARPA concentrated on computing. Both were part of America's wish to be ahead of the USSR in the Cold War.

b IMPs allowed computers to talk to each other. In other words to join a network. They acted as translators.

c They were rare (only owned by universities, big corporations or governments), as big as apartments and expensive.

d They thought that it was impossible because the IMP's would have to be as big.

4 a Bob Khan / Frank Heart

b Larry Roberts / Bob Taylor

c Ray Tomlinson

d Vint Cerf / Bob Khan

5 a 7 b 4 c 10 d 8 e 2 f 6 g 1 h 9  
i 3 j 5

6 a successful b imagined c co-operate  
d efficiently e furthermore f software  
g deliver h surprising i e-mails j state

7 Possible answers:

a Paul showed him the picture of the Altair on a magazine.

b excited about Altair / personal computers.

c meet Ed Roberts at MITS.

d they only had enough money for one ticket.

8 a 8080 b 1979 c 1975 d 1977 e 3,220  
f 1981 g 5 h 1980, 2 i 400,000

9 a T b T c F d F

10 a He was working for CERN near Geneva in Switzerland.

b He got the idea from the book 'Enquire Within'.

c You can choose any path through a text and link to anything.

d he wanted to make communication between the scientists at CERN easier.

## The Story of the Internet

- 11 a 'Enquire Within' was published.  
 b Berners-Lee began writing his World Wide Web programme.  
 c Tim got a job at CERN.  
 d CERN put Berners-Lee's browser programme on the Internet.  
 e Berners-Lee wrote a plan for a hypertext project.  
 f CERN began using Berners-Lee's browser.
- 12 a Marc Andreesson b John Mittelhauser  
 c Jim Clark d Bill Foss e Marc Andreesson
- 13 a Marc Andreesson b Jim Clark  
 c John Doerr d George Bush
- 14 a He was angry because they took the credit for Mosaic.  
 b They might have been angry because Marc took away some of their computer engineers.  
 c It crashed all the time.  
 d He wanted to learn how to be a great businessman.
- 15 Suggested answers  
 a What do search engines do?  
 b Where did Jerry Yang and Dave Filo meet?  
 c How did they find the name 'Yahoo!'?  
 d Which company tried to buy Yahoo!?
- 16 a He didn't work for anybody.  
 b He worked for a computer company.  
 c A lot of software can be downloaded free.  
 d Someone put stories about the Indian army's crimes on its web site.
- 17 Possible answers:  
 a No one knows, but it is probably bigger than any library on earth.  
 b You can use search engines.  
 c It uses a different way of searching the Web. It uses people to 'surf' the net and then put sites into one of fourteen different categories.  
 d Because they did not want to work for AOL and they did not want Yahoo! to have its name changed.

### Progress test key

- 1 a believed  
 b reacted / creating  
 c hoped /share  
 d choice  
 e translating  
 f wrote
- 2 a small b avoid c on d constant e spider
- 3 a Bill Gates was playing cards with some friends.  
 b Both of them saw Altair as their big chance.  
 c They had not actually written the program that they had promised.  
 d Paul Allen was an engineer who dressed in jeans and drove an old van.  
 e Ed Roberts had no idea how difficult the project was going to be.
- 4 Possible answers:  
 a The USSR launched Sputnik in 1957.  
 b Packet-switching technology means the packets are just like envelopes.  
 c Ray Tomlinson chose the '@' sign which means 'at' in email addresses.  
 d Bill Gates and Paul Allen wrote the software for the first computer Altair.  
 e Time Berners-Lee wrote a program called 'Enquire Within'.  
 f Mosaic crashed and froze all the time.
- 5 a 1 b 6 c 4 d 5 e 7 f 3 g 2
- 6 a ✓ b X c X d ✓ e ✓ f X g ✓