

1 1 F 2 F 3 T 4 F 5 T 6 T

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

3 1 C 2 A 3 B 4 A 5 C 6 B

- 4
- 1 1889
 - 2 1953
 - 3 American
 - 4 Astronomer
 - 5 Mount Wilson Observatory
 - 6 enormous telescope
 - 7 Andromeda Nebula
 - 8 distance
 - 9 galaxies
 - 10 faster

5 1 f 2 a 3 e 4 g 5 d

- 6
- 1 You would need to wear special clothes (a spacesuit) to protect you.
 - 2 They think there is some ice.
 - 3 American astronauts Neil Armstrong and Buzz Aldrin.
 - 4 People used to believe that the Moon was a mirror, or a bowl of fire, and that it was magic.
 - 5 The Moon's force of gravity makes the tides in the Earth's oceans.
 - 6 Because it is much further away from the Earth.

7

1 the speed of light	2 a light year
3 Proxima Centauri	4 a dwarf planet
5 the asteroid belt	6 the Kuiper Belt

8

1 CoRoT-7b	2 Alpha Centauri
3 55 Cancri	4 Kepler-90

9

1 inner core	2 outer core
3 mantle	4 crust
5 tectonic plates	6 atmosphere

10

1 Iceland	2 Hawaii
3 Japan	4 Indonesia

11 1 d 2 b 3 c 4 c 5 b 6 a

12

- a Carbon
- b Water
- c Amino acids
- d The right temperature
- e Gravity

13 1 c 2 d 3 a 4 b 5 a 6 d

14 1, 2, 3, 6 and 7

15

1 powerful	2 into
3 faster	4 never
5 edge	6 downhill
7 bigger	8 small

16

1 are	2 anywhere
3 eaten	4 if
5 would	6 like

17 1 c 2 f 3 d 4 e 5 a 6 b

18

1,000 years ago: c
4th October 1957: e
1st February 1958: b
in 1962: a
in the 1970s: f
in the 1990s: d

19

People in space
are more exciting
travel more slowly
need food, water and oxygen
can cost more because they need to come back

Probes in space
can travel greater distances
don't have to be big or comfortable
don't feel bored, alone or get ill
nobody dies if there is a problem

- 20 1 signs of water; Mars
 2 large volcanoes; Venus
 3 first new pictures; Mercury
 4 Great Red Spot; Jupiter
 5 the moons; Saturn
 6 lying on its side; Uranus
 7 fastest-moving winds; Neptune

- 21 1 Yuri Gagarin 2 Alan Shepard
 3 John Glenn 4 Alexei Leonov
 5 Neil Armstrong

- 22 1 b 2 c 3 b 4 d 5 a

- 23 1 What 2 How
 3 Why 4 Which
 5 Where 6 Who

- 24 1 Sometimes, **an asteroid** is pushed out of its orbit by the gravity from planets near it, and then it could hit the Earth.
 2 An asteroid hit the Earth 65 million years ago **and killed** the dinosaurs – enormous animals that once lived on the planet.
 3 We could also be burned by **gamma rays** from space, which shoot out of supernova when they explode.
 4 This **does not happen** very often, so astronomers **are not** worried!

- 25 1 fossil fuels 2 greenhouse gases
 3 plastic 4 carbon dioxide
 5 forests 6 rubbish

- 26 1 suddenly 2 totally
 3 more slowly 4 more quickly
 5 easily 6 Most importantly

- 27 1 This was maybe caused by a supernova.
 2 Since then, the distance has been measured again.
 3 Light will be pulled back in by gravity and it will not be able to escape.
 4 These metals and minerals were brought to the planet's surface when the volcanoes erupted.
 5 Winds on Neptune have also been measured at 2,200 kilometres per hour.

- 28 1 outwards 2 powerful
 3 carefully 4 comfortable
 5 towards 6 beautiful

- 29 1 Big Bang 2 black hole
 3 dwarf planet 4 light year
 5 Solar System 6 spaceship
 7 supernova 8 wormhole

- 30 1 supernova 2 Solar System
 3 spaceship 4 black hole
 5 wormhole 6 light year
 7 Big Bang 8 dwarf planet