



Section A

1. What is the name of our planet?
2. What is the biggest light source for our planet?
3. Give an example of a planet in our solar system.

Section B

1. What is a planet?
2. What is a star?
3. What is an exoplanet?
4. What is a galaxy?

Section C

1. Approximately how long does it take light to travel from the Sun to the Earth?
 - A. 8 Seconds
 - B. 8 Minutes
 - C. 8 Hours
 - D. 8 Days
 - E. 8 Years
2. A student makes the following statements about the Universe.
 - I. The Big Bang Theory is a theory about the origin of the Universe.
 - II. The Universe is approximately 14 million years old.
 - III. The Universe is expanding.

Which of these statements is/are correct?

- A. I only
- B. II only
- C. I and II only
- D. I and III only
- E. I, II and III

3. Which term describes an object which orbits a star?
 - A. moon
 - B. planet
 - C. solar system
 - D. galaxy
 - E. universe
4. The table gives the distance from Earth, the approximate surface temperature and the age of five stars.

Star	Distance from Earth (light-years)	Approximate surface temperature (K)	Age (years)
Sirius A	8.6	9900	2.4×10^8
Polaris	430	6000	7.0×10^7
Betelgeuse	640	3600	7.9×10^6
Rigel	860	11 000	8.0×10^6
VY Canis Majoris	3900	3500	1.0×10^7

A student makes the following statements based on this information.

- I. As the distance from Earth increases, the age of a star decreases.
- II. As the age of a star increases, the approximate surface temperature of the star increases.
- III. There is no apparent relationship between the distance from Earth and the approximate surface temperature of a star.

Which of these statements is/are correct?

- A. I only
- B. II only
- C. III only
- D. I and III only
- E. I, II and III



Section D

1. Copy and complete the passage.

<i>Moons</i>	<i>Universe</i>	<i>Planets</i>	<i>Galaxy</i>	<i>Stars</i>	<i>100 000</i>
	<i>days</i>	<i>4.3 years</i>	<i>8 minutes</i>	<i>100 000 years</i>	

The Milky Way is the name of our It is a collection of about 100 000 million , one of which is our Sun.

It takes for light to travel from the Sun to Earth and for light to reach the Earth from the edge of the Milky Way.

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2. In the future it is hoped that humans will be able to travel to Mars. One challenge of space travel to Mars is maintaining sufficient energy to operate life support systems.

a) Suggest one solution to this challenge.

1

b) State another challenge of space travel to Mars.

1

3. An astronomer views the following objects in the night sky:

Jupiter, which orbits the sun;

Europa, which orbits Jupiter;

The Andromeda Galaxy

a) Which of the objects mentioned is a moon?

1

b) Which of the objects mentioned is a planet?

1

c) Which of the objects mentioned is a star?

1

4. One astronomer has estimated that there may be around 16000 other intelligent civilisations in the Milky Way galaxy.

Using your knowledge of Physics, explain whether or not you agree with the astronomer.

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