P2 g-h LAT

1. Complete the sentences. Choose from **(4)**
   bounced collided dust ice Jupiter Mars orbited rocks Venus
   Asteroids are ____ some of which have_____ with Earth in the past. They normally orbit between _____ and _____.

2. The sentences describe what happens when an asteroid impacts on the Earth. Put them in the correct order.
(4)
   A starting fires where they land
   B many plants and animals die
   C sunlight is blocked by dust
   D hot rocks are thrown up
   E a crater is formed

   ___ ___ ___ ___ ___

3. **Match the start and end of the sentences**

1. a comet is		**made from rock**
2. an asteroid is		**a comet or an asteroid**
3. a Near Earth Object is		**made from dust and ice**

(2)

4. There is evidence on Earth for collisions with asteroids in the past. Describe three pieces of evidence

   1 _____

   2 _____

   3_____

   (3)

5. **A comet recently hit Jupiter**
   a. **Where do comets come from? _____(1)**

   b. **What are comets made from? _____ (1)**

   c. **Why does a comet have a tail? _____**
   (2)

6. **The sentences are about the Big Bang theory. Put them in the correct order. (2)**
   A a huge explosion
   B and then continues to expand
   C the Universe comes in to being

   _____ _____ _____

7. **How is the speed of a galaxy related to its distance? (3)**

_____

_____

8. Match the start and the end of the sentences (2)

a black hole		**collapses to make a star**
a gas cloud		**doesn't emit light for ever**
a star		**doesn't allow light to escape**

9. The sentences are about the story of the Sun. Put them in the correct order. (4)

A stopping the collapse by emitting heat and light
B then collapses and cools to form a white star
C when hydrogen runs out, the star swells to a red giant
D a cloud of hydrogen gas collapses under its own gravity
E heating up until fusion reactions start to confirm hydrogen to helium

10.

a red giant is		a star which has stopped a fusion reaction
a planetary nebula		an exploding star
a white dwarf is		a star which has ran out of hydrogen fuel
a black hole		hydrogen fusing to make helium
a star is		the massive remains of a supernova
a supernova		A cooling star which sheds material in to space

(6)

11.

Asteroids are made of rock.

They are mainly found in the asteroid belt.

(a) Where in the Solar System is the asteroid belt?

Put a tick (✓) in the correct box.

place in solar system	tick
between the Sun and Mercury	
between Earth and Mars	
between Mars and Jupiter	
between Neptune and Pluto	

[1]

(b) When were the asteroids formed?

Put a tick (✓) in the correct box.

asteroids were left over from	tick
the formation of the Solar System	
the formation of our Moon	
the formation of Venus	
comets colliding	

[1]

(c) In the past, asteroids have hit the Earth.

Suggest what happened to the Earth when an asteroid hit.

.....

..... [1]

[Total: 3]

12.

People often think about how the Universe began.

One theory that explains the start of the Universe is the **Big Bang**.

The Big Bang started with an explosion.

(a) What is **still** happening to the Universe after the Big Bang?

Put a (ring) around the correct answer.

getting bigger

staying the same size

getting smaller

[1]

(b) Stars began to form after the Big Bang.

They are not formed from an explosion.

Complete the sentence.

Stars begin their life as ..... . [1]

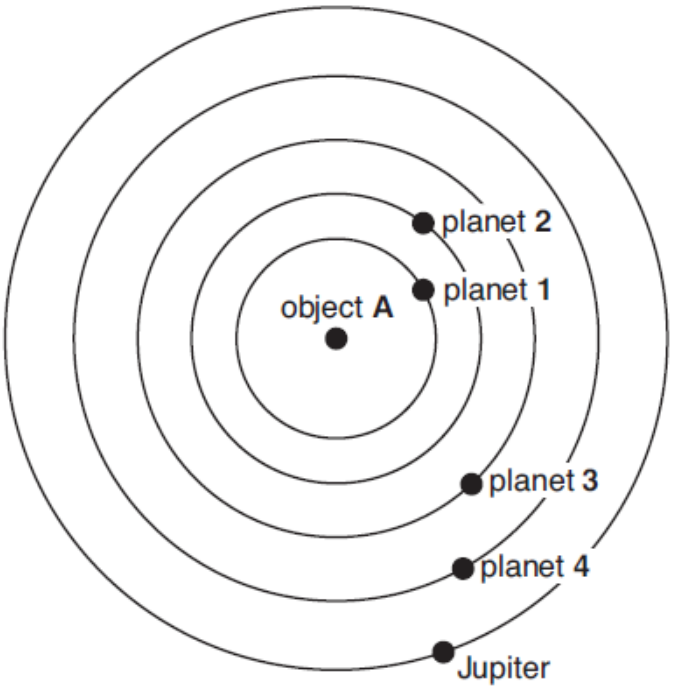
[Total: 2]

13.

This question is about our Solar System.

Look at the diagram.

It shows **some** of the planets in our Solar System.



(a) The planets orbit around object **A**.

What is the name of object **A**?

.....[1]

(b) **(i)** The **asteroid belt** is between Jupiter and planet **4.**

What is the name of planet **4**?

.....[1]

(ii) What are asteroids mainly made of?

.....[1]

(c) **(i)** An asteroid is an example of a **Near-Earth Object** (NEO).

Name another example of a NEO.

.....[1]

(ii) What do scientists use to observe NEOs?

.....[1]

[Total: 5]

14

This question is about the Universe.

(a) Objects beyond our Solar System, such as galaxies, are very large distances away. Scientists measure these very large distances in **light-years**.

Describe what is meant by a light-year.

.....

.....[1]

(b) The **Big Bang** theory describes how the Universe began.
The Big Bang led to the formation of galaxies.

What does the Big Bang theory say about the movement of galaxies?

.....[1]

(c) There is a lot of evidence for the Big Bang theory.

Look at the two statements about light reaching Earth from galaxies.

The statements are incomplete.

Complete the statements in the right hand boxes.

Seen from Earth, light from galaxies is shifted	....
The further away galaxies are	....

[2]

[Total: 4]

Total = (48)
% =
Grade
Target Grade