

Grade 7 Natural Science Worksheet

Assessment Task: Solar system: definitions

Solar system facts

Part One: Vocabulary test

Vocabulary test: Write full definitions for each of these terms.

1. Asteroid
2. Astronomy
3. Atmosphere
4. Comet
5. Constellation
6. Galaxy
7. Meteoroid
8. Meteor
9. Meteorite
10. Moon
11. Orbit
12. Satellite
13. Star
14. Supernova

[14 marks]

Part Two: Research about our solar system

What is our solar system and how did our solar system begin?

Do some research on this question and write your answer as a detailed explanatory paragraph.

[10 marks]

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Suggested Solutions

Question number	Possible marks	Solution
1	14	<p>Asteroid – large lump of rock and metal that orbits the Sun.</p> <p>Astronomy – study of bodies in space.</p> <p>Atmosphere – the protective layer of gases around a planet.</p> <p>Comet – lump of frozen gas and dirt orbiting the Sun.</p> <p>Constellation – pattern of stars in the sky, e.g. Scorpio, Orion.</p> <p>Galaxy – large collection of stars, held together by gravitational attraction.</p> <p>Meteoroid – small piece of space debris.</p> <p>Meteor – a meteoroid that starts to burn up as it enters the earth’s atmosphere.</p> <p>Meteorite – remains of a meteor that has landed on earth.</p> <p>Moon – natural satellite orbiting a planet.</p> <p>Orbit – to circle around an object.</p> <p>Satellite – an object orbiting a star or planet.</p> <p>Star – ball of tremendously hot gas which produces heat and light from nuclear reactions in its core.</p> <p>Supernova – colossal explosion when a star dies.</p>
2	10 – Any ten facts	<p>It is estimated that about 10 000 million years ✓ after the Big Bang, the Sun and planets of our solar system formed near the edge of a galaxy that is now known as the Milky Way. ✓ The Sun is a star. ✓ Everything that orbits the Sun is known as our Solar System. ✓ This includes planets and their moons, chunks of rock called asteroids, icy debris and huge amounts of dust. ✓</p> <p>Scientists believe that our Solar System began when the gas cloud left over from a giant supernova explosion ✓ started to collapse in on itself and spin. ✓ A huge cloud of hot dust and gas was left circling the new star, which was our Sun. ✓ The Sun has a huge pulling force called gravity, so the dust kept circling the Sun, attracted by this force of gravity. ✓ The planets began to form when tiny pieces of space debris began to clump together, pulled together by each other’s gravity. ✓ More space debris would join the clumps making them bigger until they could be called planets. ✓ It is estimated that the Earth came into being about 4 600 million years ago. ✓</p>