

Space
KS4
Monday - Science

Watch the following videos about the solar system and the life cycle of a star.

<https://www.youtube.com/watch?v=mndRVjMovQk>

<https://www.youtube.com/watch?v=V0Y1JIVuin4>

Use these videos and your own research to answer these questions.

1. Explain why a comet cannot be seen when it is far away from the sun.
2. Write one difference and one similarity between a comet and an asteroid.
3. Which planet in the solar system is:
 - a. The largest?
 - b. The closest to the sun?
4. The earth's orbit is almost circular. State and explain two ways in which conditions on Earth would differ if the Earth's orbit was like the orbit of a comet.
5. Describe how the sun formed from dust and gas clouds in space.
6. Explain what a main sequence star is and why the Sun is a main sequence star.
7. Create a flow chart of the different stages of the Sun.
8. At which stage is the Sun at now?
9. Describe what will happen after the sun has gone through these stages,
10. Explain why a white dwarf eventually becomes a black dwarf.
11. Describe two differences between a red giant star and a neutron star.
12. Explain why all the uranium in the earth has not decayed by now.