



Travelling in Space homework



The answers to most of these questions should be in your Science jotter. If not, you will need to research to find the answers, including the final question.

Level 3

1. To support life on Earth we require certain conditions.
 - (a) State three conditions required to support life on Earth.
 - (b) Explain why the Earth is just the right distance from the sun.
2. State what each symbol represents and the units of each symbol in the equation; $d = v \times t$.

Level 4

3. A student runs with a speed of 6 ms^{-1} for a time of 12 s.
Calculate the distance travelled by the student.
4. Distances in space are so big that we use the term 'lightyear' as a measurement of distance.
 - (a) State what is meant by the term lightyear.
 - (b) State the speed of light (include the units).
 - (c) It takes light 1.3 s to travel to the moon.
Calculate the distance from the Earth to the moon in metres.
 - (d) The star Betelgeuse is 640 light years from Earth.
Calculate this distance in metres.
5. The 'Pillars of Creation' is a region of Space which fascinates Scientists. Provide at least three pieces of information about what is happening there. State the source of your information and why it should be trusted.