

1. What is the most recent technological development regarding space travel and why are many people excited about it?
2. What is the Hubble telescope and how does it differ from ordinary telescopes? **Shoemaker Levy – 9** was involved in an extremely violent event a few years ago but what has that got to do with the Hubble telescope?
3. What do we mean by space research 'spin offs' and give an example of one such spin off.
4. The *gravitational field strength* on Earth is 9.8 Nkg^{-1} . Explain what this means. You must use the words Force and 1.0 kg in your explanation.
 - i) A rocket has a mass of 65, 000 kg, calculate the pulling force the Earth exerts on the rocket.
 - ii) Write down the rockets weight.
 - iii) What is the minimum force needed to make the rocket rise?