



## Fact Sheet Questions

1. Arrange these bodies in size order, starting with the smallest first: the **Earth, Mars, Phobos, Deimos** and the **Moon**.
2. How many times heavier is the:
  - Earth than the Moon
  - The Earth than Mars
  - The Moon than Phobos
  - The Moon than Deimos
3. Which body is the most dense?
4. Which body is the least dense?
5. How many times further away from the Earth is Mars than the Moon (use the maximum distance for Mars).
6. The time it takes the Earth to turn around once on it's axis (a day!) is similar to the rotation period for which other body.
7. Which body has the most dense atmosphere and which has the least?
8. How many times more Nitrogen is in the Earth's atmosphere than in Mars' atmosphere?
9. Which is the most common gas in the Martian atmosphere?
10. Do you think that you could breathe on the Moon without the help of a space suit? (hint – look at the atmosphere section on the Moon fact sheet).
11. Which moon is closest to Mars, Phobos or Deimos?
12. Put these bodies in order of surface gravity, starting with the strongest gravity: **Mars**, the **Moon** and the **Earth**.
13. Put the same bodies in order of escape velocity (*this is the speed you have to give something e.g. a rocket, so that it can escape the gravitational pull of its home planet and go out into orbit or space*) starting with the highest velocity.
14. Looking at the answers to the last 2 questions, how do you think that escape velocity is related to surface gravity.
15. Would it take the most fuel to launch a 1000 kg rocket from the Earth, Mars or the Moon?