7DBl Homework Sheet 5

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A rough guide as to how the marks are given is as follows:

		Effort Grade		Achievement of task
A	Excellent	this effort grade will rarely be given – to get this mark the work must demonstrate great effort and real clarity	+	Excellent understanding of the work
B	Good	will be given e.g. when a lot of effort has obviously been put into the work or when the work is very clearly set out	=	Good understanding of the work
C	Average	will be given for work which is of a satisfactory, acceptable standard; if you get less than C you must improve the standard at once!	−	Poor understanding of the work
D	Poor			
E	Very Poor			

If a question has one or a number of * before it then it contains points which are inherently difficult and which will be met more generally in subsequent years.

Don't forget to do your homework in the **back** of your exercise book!

8 On the Moon

a. A lunar month is the time taken for the Moon to orbit Earth.

   i. Approximately how many days are there in a lunar month?

   ii. How many lunar months are there in one year?

b. Explain the positions of the Sun, Moon and Earth when we can see

   i. a new Moon,

   ii. a full Moon,

   iii. a half Moon.

c. Find out:

   i. What causes the tides to occur?

   ii. Why are there two tides each day?

d. If it is high tide at 9.0 a.m. when is the next...

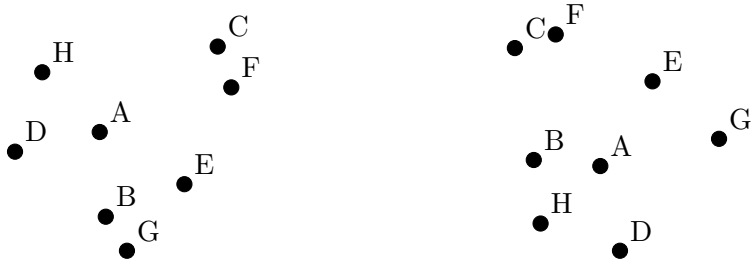
i. . . . low tide?

ii. . . . high tide?

9 On the Sun and stars

a. The Sun is one of a collection of stars called the Milky Way. What is the name given to a group of millions of stars such as the Milky Way.

b. The diagrams below shows the same part of the night sky on two different days. One of the objects is a planet and the others are stars.



Which object is the planet? Explain why you chose it.

c. Planets used to be known as wandering stars because they change their position in the sky. The stars seem to be fixed, even though they move at high speed. Why do the stars seem to be fixed while the planets move?

d. Find out the temperature of:

i. the surface of the Sun,

ii. the core of the Sun.

e. Find out and explain in one sentence (your own words) what the following are:

i. Sun spots,

ii. Solar flares,

iii. Solar prominences.