Task 2:

Complete the missing words in the diagrams below:-



Thus, most of the rocks of the present day Atlas Mountain Range were once on the floor of an ancient ocean.

Ocean floor rocks are **sedimentary rocks**. The following diagrams show how this type of rock is formed. (**Note**: The numbers contained within the bullet points below refer to numbers on the Stage 1, Stage 2 and Stage 3 diagrams below).

- Sedimentary rock is formed from **sediments** (2) building upon the ocean floor;
- These sediments have come from the weathering and erosion of other, older rocks;
- Rivers (1 & 5) have carried these sediments into ancient seas where they have been deposited (2, 3 & 4);
- This was all happening **hundreds of millions of years ago**; it was a slow process but it built up great depths of **sediments** on the floors of these ancient oceans (**3** & **4**).



Task 5:

The traditional building material of Berber houses is **pisé**. This gives the buildings a pale pink hue.

Pisé is a mixture of **mud** and **straw**. This material, obtained from the river beds, is formed into mud bricks.

The picture opposite shows an example of a traditional group of Berber buildings.



Into the table, add some of the features of these buildings and state their appearance/purpose:-



Task 6:

Just as with physical landscapes, human geography also changes through time. The Berber village over which you are looking – and perhaps where you are presently engaging with some of its youngsters! – will change significantly over the generations (each generation is about 25 years).

(a) Divide into small groups; your teacher(s) will assist in this.

(b) Find an area to move into, away from other small groups.

(c) In your group,

(i) take a look around you; take in the settlement and farmscape;

(ii) make a list of the human geography processes that will affect the settlement and farmscape; jot them down:-

(iii) Now write down a few statements to describe how you think that these human geographical processes will affect the settlement and farmscape in the next 25 years:-



Task 2:

Into the definition table below, add the correct term, choosing from suspension, saltation, surface creep:-

Term	Definition
	how medium sized sand grains move; they are lifted by stronger winds and carried forward a few cms/ms before being dropped; this action is repeated many times and the grains "leapfrog" across the desert floor.
	how the finest grains of sand/dust move; they are lifted high off the ground and can be carried many tens of kms away from the source area.
	how the densest of particles of all move; unable to be lifted above the ground's surface, these grains are repeatedly "pushed" along the ground in fits and starts.

How Sand Dunes Form:

With periods of **steady wind** throughout the year, the desert sand progressively moves across the desert floor. It is when the moving sand encounters an **obstacle** that an **"embryo"** (initial) **dune** begins to form. The obstacle could be a large **stone**, a living **plant** or a dead tree **branch**. Given time, and a sufficient supply of sand, these embryo dunes can grow into considerable **sand hills**.

In the **lee** of an obstacle (i.e. the **sheltered side**, the side away from the wind), the wind speed is a lot less than on the **windward side** (the side facing the wind).

Thus, as the wind carrying sand grains in suspension goes over the obstacle, its **wind speed drops** on the lees side and, with **less energy**, it **drops** some of its **sand**. As a result, the sand begins to **accumulate** (build up) behind the obstacle. As a result, the accumulation of sand has now increased the size of the obstacle.

The now larger obstacle offers even more wind resistance, more sand is dropped behind the obstacle ... and a sand dune begins to develop and grow. The diagrams below illustrate this:-



Task 3:

If it is windy today when you stop amongst the sand, design a simple experiment to test the above theory of sand dune development, as outlined above, out-in-the-field:-

Describe your **plan** and describe your **results**:-