**THE BEMROSE SCHOOL**

**BTEC APPLIED SCIENCE LEVEL 3 TRANSITION WORK**

**Work completed contributes towards Unit 1**

Task 1

**Scenario**

In quality control laboratories tests are carried out to check the quality of substances, whether they are raw materials, materials being produced/manufactured on a large scale or checks on such substances such as the quality of river water or soil or foods.

As part of your professional development as a new science technician working in the quality control laboratory of a pharmaceutical manufacturing chemical company, you have been asked to investigate:

* some key features of the periodic table

Using the elements sodium, potassium, calcium, magnesium, carbon, oxygen, nitrogen, fluorine, chlorine, iron, hydrogen and sulphur, describe some key features of the periodic table such as:

* How they are organised in groups, periods and blocks.
* Any trends in their chemical and physical properties in the groups they belong to

and the periods they are in.

* Their atomic number and relative atomic masses.
* Their electronic structures.

Task 2

Scenario

As a scientist working in an environmental research centre, you have been asked to explain to a party of visiting students how plants and animals are made up of tissues and how those tissues are in turn made up of cells. You have also been asked to explain how the different types of cells and tissues are adapted to carry out particular functions.

Use drawings to produce a large, attractive poster that describes the structures of different types of cells that you have looked at and their functions. Each picture should have a title which tells you what it is and the magnification. E. g.

1. A labelled animal cell 2. A labelled plant cell
2. Some cells from :
3. small intestine
4. cardiac muscle
5. connective tissue