

# Applied Biology Flying Start

To be successful in Applied Biology, you will need to GET ORGANISED

## 1. Go on a shopping trip to buy your Biology Kit. You will need

- Loose Leaf file with sheets of paper
- Cardboard dividers
- Pen
- Pencil
- Ruler
- Eraser
- Coloured pencils or pens
- Scientific Calculator (for example, Casio natural display £8.99 from Argos is OK)



All of these you will need for your very first lesson

## 2. Revise some basic biology, by completing the following tasks.

On a large sheet of paper, draw diagrams of the following different types of cell.

Red blood cell, white blood cell, nerve cell, muscle cell, sperm cell, bacterial cell, palisade mesophyll cell (from a plant leaf).

Label the diagrams, and explain how the structure of the different types of cell is suited to its function.

## 3. See how much biology you can remember from Science GCSE.

Complete the table on the next page.

## Are the statements true or false?

		True	False	If you have chosen false explain why.
1	Enzymes make reactions happen.			
2	Photosynthesis converts carbon dioxide to oxygen			
3	All arteries carry oxygenated blood.			
4	Particle only move in one direction when they diffuse.			
5	An adult human lung contains 750 million alveoli. This is to provide a large surface area for gaseous exchange.			
6	Skin is a tissue			
7	Arteries have a thick muscular wall so that they can pump blood.			
8	Muscles expand and contract.			
9	Pasta and potatoes are examples of carbohydrates.			
10	Plants breathe carbon dioxide whereas animals breathe oxygen.			
11	The coronary arteries supply the heart muscle with oxygen and glucose.			
12	Proteins are long chain polymers made up of the monomer glucose.			
13	Nerves carry messages.			
14	Plant cells have a cell wall. Animal cells have a cell membrane.			
15	A gene is a length of DNA that carries the genetic code for a single protein.			
16	Meiosis is a form of cell division.			
17	The more ice-creams sold in a day the more cases of heat stroke are reported. Therefore ice-cream causes heat stroke.			
18	The overuse of antibiotics <u>make</u> bacteria mutate into resistant strains.			
19	Enzymes are killed at a high temperature.			
20	Respiration means the same thing as breathing.			