



my-GCSEscience.com

The leading source of online video tutorials dedicated to the **new 9-1 Science GCSEs**



# Tricky vocabulary in biology

By KATIE ROSS

Biology is a vocab-heavy subject. You need to learn lots of words (often based on tricky Latin or Greek terms). And so many biology terms are similar yet have very different meanings. Time and again, students get confused in the exams. This blog highlights some common confusions and explains the tricky vocabulary so that you get it right in the GCSE!

Much of the confusion occurs with the 'A' word and the 'G' words. Often students get mixed up with their acids, and confuse mitosis with meiosis. Below, we go through all of these in turn.

## The 'A' Team

Let's start with the words beginning with 'A'; antigen, antibody, antibiotic. Not only do they look similar but they all belong in the topic associated with communicable or infectious diseases.

### Antigens

The term **antigen** translates to **anti**body **gen**erating. All cells have surface proteins called antigens, which serve as unique identity markers. If pathogens (harmful cells with *different* antigens) are present, the body's own security guards (the white blood cells) will quickly seek out and destroy these cells using weapons called antibodies, which have specific shapes.

Sign up for **FREE** introductory resources at  
[www.my-GCSEscience.com](http://www.my-GCSEscience.com)

## Antibodies

Antibodies are mass-generated in response to a specific antigen entering our bodies. Often our own immune system can generate the correct quantities of the antibody to help us recover from an infection.

## Antibiotics

In cases where the infection is bacterial and it is stronger than our bodies can cope with, we can be prescribed antibiotics. These are drugs that destroy the bacteria or prevent the bacteria from replicating. In the latter case, this will buy some time for other white blood cells (the phagocytes) to go around and ‘gobble up’ or engulf the pathogens!



## Don't Guess the 'G' words!

The words beginning with 'G' belong to different topics.

### Glucose, Glycogen, Glucagon

If there is too much glucose in the blood, some of it is converted into glycogen and stored in the liver or in muscle cells. When glucose levels drop, such as during a spell of exercise, extra glucose can be released from glycogen but only when the signal is given. This signal comes in the form of a hormone called glucagon. Remember: when the glucose has **gone**, **glucagon** comes to the rescue!

### Glycerol

The final 'G' is glycerol. This has nothing to do with glucose or carbohydrates. Instead, it's part of a *lipid* molecule, alongside fatty acids.



## The acids

That brings us to our next source of confusion: acids.

- Lipids break down into fatty acids and glycerol.
- Hydrochloric acid is found in the stomach.
- Amino acids are the building blocks of proteins.
- Lactic acid is formed during anaerobic respiration – think about all those P.E. lessons when you got muscle fatigue after sprinting!

## Mitosis and meiosis

Last but not least, it's easy to get mixed up between the two types of cell division.

### Mitosis

Mitosis (pronounced my-toes-sies) is the formation of new cells that are identical to the parent cells. Toes are not sexy!

### Meiosis

Meiosis *is* sexy. Well, it's not really. But it does lead to the formation of gametes (sex cells) and the word itself has the letter 'e' in it which (obviously) stands for 'egg'. That'll help you remember meiosis in its correct context.

Now it's one thing knowing the difference between these two words, but you're also expected to actually *spell* both of them correctly! So before the exam, write them both out repeatedly. Again and again and again... and while you write them picture cells dividing again and again and again!

