

## Citizenship

**Goals** – What we want to achieve. Sometimes a ‘good’ outcome is judged to be morally correct regardless of how it was achieved – ‘the end justifies the means’.

**Rights** – How we are entitled to be treated. Examples: We have a moral right to expect a friend to keep a promise. We have a legal right to education. We have a human right to be treated fairly by others.

**Responsibilities** (also known as **duties** or **obligations**) – How we are expected to behave. Examples: We have a moral responsibility to keep a promise.

**Science** – mostly about farming

**Science** – Exploration of the natural world, using systematic processes. Science provides knowledge about what *can* be done.

**Scientific evidence** – Information, facts or knowledge which are obtained by scientific enquiry.

**Herbicides, pesticides, fungicides** – Chemical substances used to control or eliminate weeds (herbicides), invertebrate pests (pesticides) and moulds (fungicides) which might reduce crop yields. Often known, together with synthetic fertilisers, as ‘chemicals’ or ‘agrochemicals’.

**Fertilisers** – Chemical substances added to the soil, or sprayed directly onto crops, to increase the yield by supplying vital substances such as nitrogen, which the plants need for growth. Organic fertilisers are usually obtained from rotted organic matter. Synthetic fertilisers are a major product of the chemical industry and are often known, together with herbicides etc., as ‘chemicals’ or ‘agrochemicals’.

**Values** – The beliefs we consider as of greatest worth. Our values may be based on our morals, our religious beliefs, our upbringing and our culture.

**Ethics** – The processes we use to help us decide on issues of right (good) and wrong (bad). Ethics helps us decide what *should* be done. (Can also refer to what we consider right or wrong in a particular area, e.g. environmental ethics, ethical investments.)

**Morals** – Beliefs about what is right and wrong. Example: One person may consider that it is always important to tell the truth. Another person may consider that you should normally tell the truth, but not if it’s going to result in someone being hurt.

**Nitrogen** – A chemical element; a gas which makes up 79% of the Earth’s atmosphere. In agriculture, a requirement for plant growth. Some plants can obtain nitrogen from the air; these are nitrogen ‘fixers’. Others need the nitrogen supplied as a chemical compound, usually as a nitrate (nitrogen combined with oxygen and other elements).

**NPK fertiliser** – A fertiliser containing three vital elements for plant growth: nitrogen (N), phosphorus (P) and potassium (K).

**Organic farming** – An approach to agriculture in which plants and animals are raised with the minimum use of ‘chemicals’ such as synthetic fertilisers, herbicides and antibiotics.

**Antibiotics** – Substances such as penicillin which kill bacteria and other microbes. Originally obtained from living organisms, but now often synthetic. In organic farming, used to cure sick animals. In non-organic farm, used to promote growth of animals.

**Sustainable development** – Ensuring a better quality of life for **everyone** now **and** for generations to come. This includes effective protection of the environment and prudent use of natural resources.

**Intensive farming** – Farming in which large yields are obtained from a small area by the use of large inputs of fertilisers, animal feeds, etc.