

Pharmabees Glossary of Terms:



Session 1

Abdomen: The part of the body of a vertebrate containing the digestive and reproductive organs; often called the belly. In bees (and many insects) it is the hinder part of the body, the segment of an insect's body behind the thorax.

Airborne: Transported by air.

Antibacterial: Anything that destroys bacteria or suppresses their growth or their ability to reproduce. For example, heat, chemicals such as chlorine, and antibiotic drugs all have antibacterial properties.

Antibiotic: A drug used to treat bacterial infections. Antibiotics have no effect on viral infections.

Antimicrobial: An antimicrobial is an agent that kills microorganisms or stops their growth. Antimicrobial medicines can be grouped according to the microorganisms they act primarily against. For example, antibiotics are used against bacteria and antifungals are used against fungi.

Asexual Reproduction: Reproduction by which offspring arise from a single organism, and inherit the genes of that parent only.

Bacteria: Bacteria are microscopic living organisms that can be found everywhere. They can be dangerous, such as when they cause infection, or beneficial, as in yoghurt, and those that decompose wastes.

Biodiversity: The variety of plant and animal life in the world.

Carbohydrates: Carbohydrates are the sugars, starches, and fibers found in foods such as fruits, grains, vegetables and honey.

Conservation: Conservation is the preservation or efficient use of resources, and often is a plan for avoiding the unnecessary use of natural materials such as wood, water, or fuel.

Crop: The stomach of a bee only used for honey storage.

DNA: Deoxyribonucleic acid (DNA) is a chemical made up of two long molecules, arranged in a spiral, called a double-helix structure. DNA carries genetic information. It has all the instructions that a living organism needs to grow, reproduce and function.

Ecological Relationship: An ecological relationship is the relationship between an organism in its ecosystem.

Ecosystem: a biological community of interacting organisms and their physical environment.

Electrostatic Charge: the electric charge at rest on the surface of an insulated body (which establishes and adjacent electrostatic field).

Enzyme: Enzymes are biological molecules (typically proteins) that significantly speed up the rate of virtually all of the chemical reactions that take place within cells. They are vital for life and serve a wide range of important functions in the body, such as aiding in digestion and metabolism.

Evaporation: is the process of a liquid changing to a gas, caused by an increase in temperature and/or pressure. Evaporation is a fundamental part of the water cycle and is constantly occurring throughout nature.

Exoskeleton: The external skeleton that supports and protects an animal's body, in contrast to the internal skeleton (endoskeleton) of, for example, a human.

Extinction: is the termination of an organism or a species. The moment of extinction is generally considered to be the death of the last individual of the species, although the capacity to breed and recover may have been lost before this point.

Fertilisation: A process in sexual reproduction that involves the union of male (sperm) and female (ovum) gametes (each with a single, haploid set of chromosomes) to produce a diploid zygote which leads to the development of an embryo.

Genetic Diversity: Genetic diversity, or variation is the difference in DNA sequences between individuals within a population.

Habitat: The place where an organism or a community of organisms lives, including all living and non-living factors or conditions of the surrounding environment.

Hydrogen Peroxide: a mild antiseptic used on the skin to prevent infection of minor cuts, scrapes, and burns.

Invertebrate: Invertebrates are animals without a backbone or bony skeleton. 97% of all animals are invertebrates. Invertebrates include arthropods (insects, arachnids, crustaceans), mollusks (snails, squids, and octopuses) and more. Animals can be classified as either vertebrates or invertebrates.

Larvae: The active immature form of an insect.

Microorganism: A microscopic organism, such as bacteria, viruses, or fungi. Also called **Microbes**.

Molecule: The smallest particle in a chemical element or compound that has the chemical properties of that element or compound. Molecules are made up of atoms that are held together by chemical bonds

MRSA: methicillin-resistant Staphylococcus aureus, A type of bacteria that's resistant to several widely used antibiotics. This means infections with MRSA can be harder to treat than other bacterial infections.

Organism: An individual animal, plant, or single-celled life form.

Pesticide: Pesticides are chemicals that are used to kill pests, including insects, rodents, fungi and unwanted plants (weeds). Pesticides are used to kill pests that carry disease, such as mosquitoes, and in agriculture, to kill pests that damage crops.

pH: a figure expressing the acidity or alkalinity of a solution

Phytochemical: chemical compounds produced by plants, generally to help them thrive or prevent competitors, predators, or pathogens

Pollination: The act of transferring pollen grains from the male anther of a flower to the female stigma.

Proboscis: The tube-like mouth part used to suck up fluids.

Protein: An example of a protein is the type of nutrient found in meats. Protein builds, maintains, and replaces the tissues in your body. Your muscles, your organs, and your immune system are made up mostly of protein.

Regurgitate: bring (swallowed food) up again to the mouth, vomit

Scientific Name: A name used by scientists, often consisting of the genus and species. Scientific names usually come from Latin or Greek. An example is *Apis mellifera* for honeybee.

Sexual Reproduction: The production of new living organisms by combining genetic information from two individuals of different types (sexes).

Solitary Bee: Of around 250 species of bee found in the UK, most are solitary bees. Unlike honeybees and bumblebees, solitary bees don't live together in colonies. A solitary female bee makes her nest alone.

Sterile: something totally clean and free from bacteria OR a living thing that is not able to reproduce sexually and create offspring.

Superbug: Used to describe strains of bacteria that are resistant to the majority of antibiotics commonly used today.

Vertebrate: Vertebrates are animals that have a backbone inside their body. The major groups include fish, amphibians, reptiles, birds and mammals. Animals can be classified as either vertebrates or invertebrates. Invertebrates don't have a backbone.