

# 8Ba - Classification and biodiversity

| Word           | Pronunciation                 | Meaning  |
|----------------|-------------------------------|--|
| biodiversity   | bi-O-die- <b>ver</b> -sit-ee  | The range of different species of organisms in an area.  |
| characteristic | kar-ack-ter- <b>iss</b> -tick | A feature of an organism.  |
| classify       |                               | To sort things into groups.  |
| extinct        |                               | An organism that no longer exists is extinct.  |
| genus          |                               | A group of similar organisms. The genus name is the first word in the scientific name for a species (the second word is the 'species name'). |
| plant kingdom  |                               | A group of organisms that have cells with cell walls made of cellulose and that are able to photosynthesise.                                 |
| species        | spee-shees or spee-sees       | A group of organisms that can reproduce with each other to produce offspring that will also be able to reproduce.                            |

# 8Ba WS - Accuracy, estimates and sampling

| Word         | Pronunciation           | Meaning   |
|--------------|-------------------------|---|
| accuracy     | ack-U-rass-ee           | A measure of how close a value is to its real value.  |
| accurate     | <b>ak</b> -yer-it       | A measurement that is close to the true value.  |
| estimate     |                         | An approximate answer, often calculated from a sample or using rounded values.  |
| population   | pop-U- <b>lay</b> -shun | The number of a certain organism found in a certain area.   |
| quadrat      |                         | A square frame, thrown randomly on the ground, which is used to sample plants in an area.                                     |
| random       |                         | When there is an equal chance for one event occurring as there is for any other events in the same set.                       |
| random error |                         | An error that can be different for every reading.   |
| sample       |                         | To take a small part of a something to investigate. You use a sample to draw conclusions about what the larger whole is like. |

## 8Bb - Types of reproduction

| Word                 | Pronunciation              | Meaning   |
|----------------------|----------------------------|---|
| asexual reproduction | ree-prod- <b>uck</b> -shun | Producing new organisms from one parent only.   |
| fertilised egg cell  | fert-ill-i-zed             | What is produced when two gametes fuse.   |
| fertile              |                            | Able to produce offspring.  |
| gamete               |                            | A cell used for sexual reproduction.  |
| hybrid               |                            | An organism produced when members of two different species reproduce with each other.                           |
| inherited            |                            | A feature that an organism gets from a parent is inherited.   |
| inherited variation  |                            | Differences between organisms passed on to offspring by their parents in reproduction.                          |
| runner               |                            | A stem that grows from certain plants (e.g. strawberry), from which new plants grow using asexual reproduction. |



| Word                | Pronunciation            | Meaning   |
|---------------------|--------------------------|---|
| sexual reproduction | ree-prod-uck-shun        | Reproduction that needs two individuals to produce a new organism of the same type.   |
| tuber               | tyew-ber                 | The swollen part of an underground stem used as a storage organ and as a method of asexual reproduction in some plants (e.g. potato). |
| variation           | vair-ee- <b>ay</b> -shun | The differences between things.   |
| zygote              | <b>zY</b> -goat          | Another term for 'fertilised egg cell'.   |

### 8Bc - Pollination

| Word              | Pronunciation            | Meaning  |
|-------------------|--------------------------|--|
| anther            |                          | A male reproductive organ in plants that produces pollen grains.   |
| carpel            |                          | The set of female reproductive organs in plants (ovary, style and stigma).   |
| cross-pollination | poll-in- <b>ay</b> -shun | When pollen is transferred from one plant to a different plant of the same species.  |
| filament          |                          | A male reproductive organ in plants that supports the anther.  |
| pollen grain      |                          | The container for the male gamete in plants.   |
| pollen tube       |                          | A tube that grows from a pollen grain down through the stigma and style and into the ovary.                                |
| pollination       | poll-in- <b>ay</b> -shun | The transfer of pollen from an anther to a stigma.   |
| self-pollination  | poll-in- <b>ay</b> -shun | When pollen is transferred from a flower on a plant to a stigma in the same flower or to another flower on the same plant. |
| sepal             |                          | A leaf-like structure that protects a flower bud.  |
| stamen            | stay-men                 | The set of male reproductive organs in plants (anther and filament).   |

# 8Bd – Fertilisation and seed dispersal

| Word                | Pronunciation                | Meaning  |
|---------------------|------------------------------|--|
| cell division       | sell                         | The splitting of a cell to form two identical cells.   |
| competition         | com-pet- <b>ish</b> -un      | There is competition between organisms that need the same things as each other. We say that they compete for those things. |
| egestion            | ee- <b>jes</b> -jun          | When faeces are pushed out of the anus.  |
| embryo              | <b>em</b> -bree-O            | The tiny new life that grows by cell division from a fertilised egg cell.  |
| faeces              | fee-sees                     | Waste food material produced by the intestines.  |
| fertilisation       | fert-ill-i- <b>zay</b> -shun | Fusing of a male gamete with a female gamete.  |
| fertilised egg cell | fert-ill-i-zed               | What is produced when two gametes fuse.  |
| fruit               | froot                        | Something used to carry the seeds of flowering plants. Fruit can be fleshy or dry.   |
| gamete              |                              | A cell used for sexual reproduction.   |
| germinate           |                              | When a seed starts to grow.  |



| Word           | Pronunciation | Meaning   |
|----------------|---------------|---|
| pollen tube    |               | A tube that grows from a pollen grain down through the stigma and style and into the ovary. |
| seed           |               | A small part of a plant formed by sexual reproduction that can grow into a new plant.       |
| seed coat      |               | The tough outer covering of a seed.   |
| seed dispersal |               | The spreading of seeds away from a parent plant.  |

# 8Be - Germination and growth

| Word                   | Pronunciation               | Meaning  |
|------------------------|-----------------------------|--|
| byproduct              |                             | A substance produced by a chemical reaction that is not the desired product of the reaction. For example, the desired product of photosynthesis is glucose, and oxygen is a byproduct. |
| chloroplast            | klor-O-plast                | A green disc containing chlorophyll. Found in plant cells. Where the plant makes food, using photosynthesis.   |
| dormant                |                             | If something is dormant its life processes are very slow.  |
| enzyme                 |                             | A substance that can speed up some processes in living things (e.g. breaking down food molecules).   |
| germinate              |                             | When a seed starts to grow.  |
| interdependent         |                             | Organisms that depend on one another are said to be interdependent.  |
| life cycle             |                             | The series of changes in an organism as it grows, matures and reproduces.  |
| mineral salt (biology) |                             | A compound containing an important element that is needed in small quantities for health (e.g. calcium). Plants get their mineral salts from the soil, animals get them from food.     |
| photosynthesis         | fO-tow- <b>sinth</b> -e-sis | A process that plants use to make their own food. It needs light to work.  |
| respiration            | res-per- <b>ay</b> -shun    | A process in which energy is released from substances so it can be used by an organism. All organisms respire.   |
| starch                 |                             | A type of insoluble carbohydrate found in plants.  |