**BIODIVERSITY**

Word bank:

survival species ecological levels

animals biotic function robust

species diminished processes trophic

Biodiversity is usually considered at three ………………….: genetic diversity, …………………. diversity, and ecosystem diversity.

**Genetic diversity:**

Genetic diversity is the variety of genetic information contained in all the individual plants, …………………. and micro-organisms. Genetic diversity occurs within and between populations of species as well as between ………………….. Genetic diversity favours the …………………. of a species, because it increases the chances that some members of the species will have characteristics that aid their survival if the population is subject to stress.

**Species diversity:**

Species diversity is a measure of the number of species at each …………………. level of an ecosystem. In simple terms, the greater the species diversity the more …………………. the ecosystem: if the population of one producer or consumer organism crashes there are other producers or consumers available that can fulfil a similar …………………. in the ecosystem. When ecosystems are diverse, there is a range of pathways for the …………………. processes, such as nutrient cycling. If one pathway is damaged or destroyed, an alternative may be used and the ecosystem can continue to function at its normal level. If the level of biodiversity is …………………., the functioning of the ecosystem is put at risk.

**Ecosystem diversity:**

Ecosystem diversity is the variety of habitats, …………………. communities and ecological …………………., as well as the diversity present within ecosystems in terms of habitat differences and the variety of ecological processes.

**Activity:**

Draw a food chain with prawns, bacteria, cod, seagrass, and sharks. Which is the producer, primary consumer, secondary consumer, tertiary consumer and decomposer? Which are part of the primary trophic level, secondary trophic level, tertiary trophic level? Labelled the trophic level which has access to the most energy/ least energy.