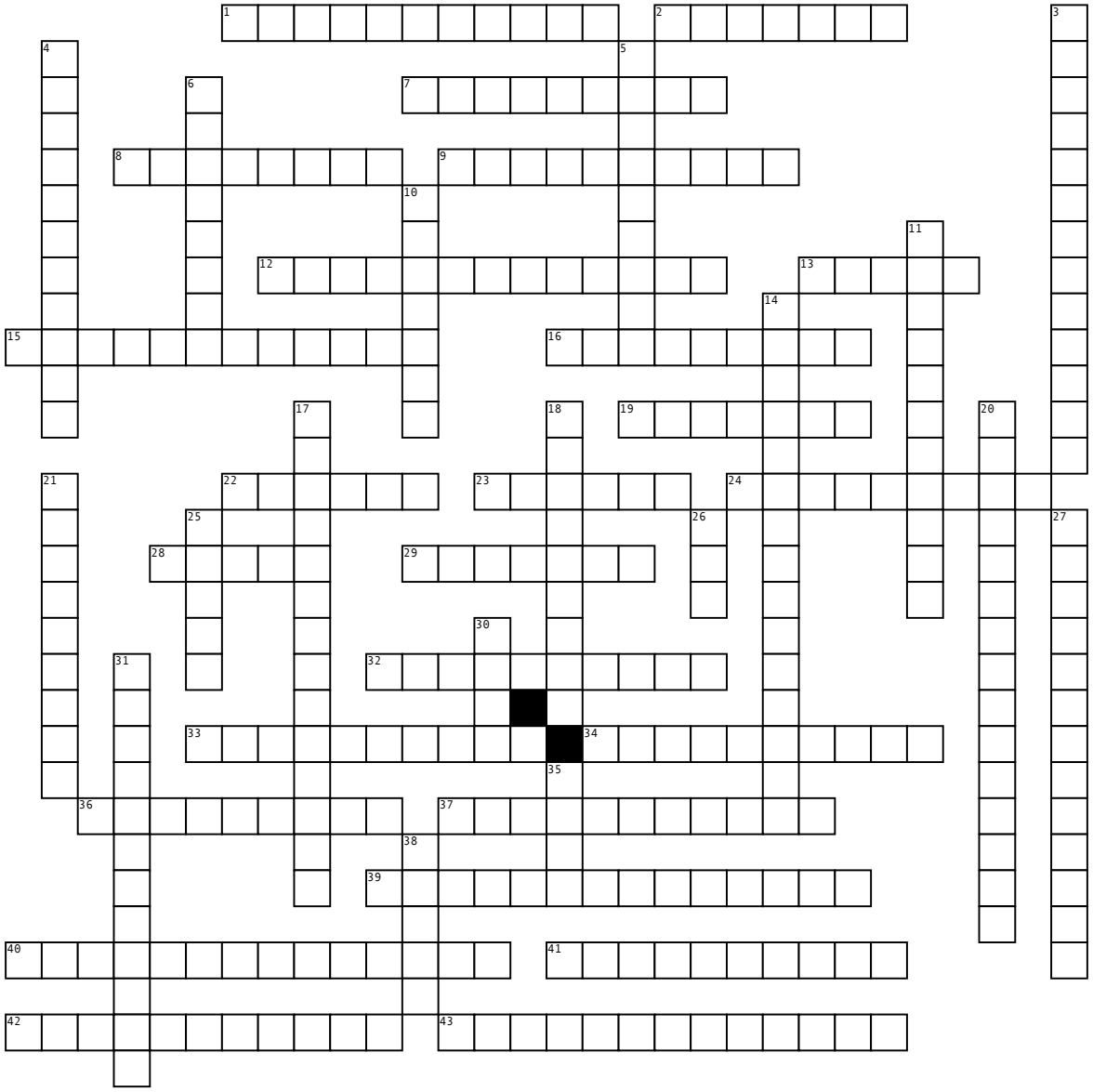
# Science 10 Unit 1



**Across**

**1.** A harmful interaction between two or more organisms that can occur when organisms compete for the same resources in the same location at the same time

**2.** Relating to non-living parts of an environment such as sunlight, soil, moisture and temperature

**7.** Organisms that produce food in the form of carbohydrates during photosynthesis

**8.** The process in which both plants and animals release carbon dioxide back into the atmosphere by converting carbohydrates and oxygen into carbon dioxide and water

**9.** The process in which rock is broken down into smaller fragments

**12.** The clearing or logging of forests without replanting

**13.** Steps in a food chain that shows feeding and niche relationships among organisms TROPIC

**15.** A symbolic relationship in which one species benefits and the other species is neither helped nor harmed

**16.** An organism that eats other organisms

**19.** Species that can greatly affect population numbers and the health of an ecosystem KEYSTONE

**22.** Relating to living organisms such as planets, animals, fungi, and bacteria.

**23.** Metallic elements with a high density that are toxic to organisms at low concentrations HEAVY

**24.** Predator-prey interactions in which one organism (the predator) eats all or part of another organism (the prey)

**28.** The largest division of biosphere, which includes large regions with similar biotic components and similar abiotic com-ponents

**29.** The average conditions of the atmosphere in a large region over 30 years or more

**32.** Changes that take place over time in the types of organisms that live in an area ECOLOGICAL

**33.** A symbolic relationship in which one species benefits and the other is harmed

**34.** A mature community, such as boreal forest, grassland, tropical rainforests, or desert, that continues to change over time CLIMAX

**36.** . The development of a new species form a common ancestor; the new species are adapted to inhabit different niches ADAPTIVE

**37.** Organisms that break down wastes and dead organisms and change them into usable nutrients available for other organisms

**39.** A process in which carbon dioxide enters the leaves of plants and reacts with water in the presence of sunlight to produce carbohydrates and oxygen; photosynthesis also occurs in some micro-organisms

**40.** The use of organisms, usually micro-organisms or plants to break down chemical pollutants in water or soil to reverse or lessen environmental damage

**41.** The dying out of a species; becoming extinct when their numbers are reduced to zero

**42.** The process in which nitrogen is returned to the atmosphere

**43.** The process in which soil particles and decaying organic matter accumulate in layers on the ground or at the bottom of large bodies of water, contributing to the formation of sedimentary rock

**Down**

**3.** Substances such as the chemicals nitrogen and phosphorous that are required by plants and animals for energy, growth, development, repair, or maintenance; important components of nutrient cycles in the biosphere

**4.** Characteristics that enable organisms to better survive and reproduce

**5.** The process in which, over time, the best-adapted members of a species will survive and reproduce. This process makes change in living things possible NATURAL

**6.** A measurement of chemical accumulation; 1 ppm means one particle mixed with 999 999 other particles PARTS PER

**10.** A model that shows the loss of energy from one trophic level to another; often called an ecological pyramid FOOD

**11.** Damage to soil SOIL

**14.** The process in which ammonium is converted into nitrate

**17.** The braking down of dead organic matter by living organisms such a bacteria

**18.** A symbolic relationship between two organisms in which both organisms benefit

**20.** The gradual build-up of synthesis and organic chemicals in living organisms

**21.** A part of a biome in which abiotic components interact with biotic components

**25.** The special role an organism plays in an ecosystem, including the way in which it contributes to and fits into its environment

**26.** A model that of feeding relationships within an ecosystem; formed from interconnected food chains FOOD

**27.** The introduction of chemicals, toxins, wastes, or micro-organisms into the environment in concentrations that are harmful to living things

**30.** Synthetic chemicals containing chlorine that are used in the manufacture of plastics and other industrial products, become stored in tissue of animals, also persist in the environment

**31.** A graph of climate data for a specific region; the data are usually obtained over 30 years from local weather observation stations

**35.** The destruction of habitats that usually results from human activates HABITAT

**38.** A model that shows the flow of energy from one plant to animal and from animal to animal FOOD