

1077 RAVIRAVI SANGAM SCHOOL

YEAR 8

SUBJECT: BASIC SCIENCE

SOLUTION WORKSHEET # 1

Questions

1. Paragraph Writing : Ecosystems- Coral Reefs

Discuss the **benefits of coral reef systems** and explain **how development and human activity have affected** the survival of the organisms there. (Expected word limit-100)

Benefits of Coral Reefs

- Protect coastlines from the damaging effects of wave action and tropical storms
- Provide habitats and shelter for many marine organisms
- Are the source of nitrogen and other essential nutrients for marine food chains
- Assist in carbon and nitrogen fixing
- Help with nutrient recycling.
- Source of living for humans. **(Many more answers.)**

How Development and Human activity have affected Survival of Organisms.

- Overfishing: Over exploitation affects the vast majority of the world's reefs.
- Agriculture: The discharge of fertilizers, waste feed and other materials from aquaculture and agriculture into coastal waters can result in nutrient loading.
- Coastal construction and shoreline development often result in heavy sediment loading.
- Dredging has many very serious implications for reefs. The most dramatic effects are caused by suspension of silt, sedimentation, turbidity, oxygen reduction and the release of bacteria and toxic matter.
- Deforestation increases siltation and sedimentation.
- Pollution of marine ecosystem harms animals living in the reefs. **(Many more answers.)**

2. Define agroforestry and discuss its importance to the environment.

Agroforestry is the intentional integration of trees and shrubs into crop and animal farming systems to create environmental, economic, and social benefits. They can control runoff and soil erosion, thereby reducing losses of water, soil material, organic matter and nutrients. They can be employed to reclaim eroded and degraded land. It avoids deforestation of an area.

3. Food chain is the sequence of transfers of matter and energy in the form of food from organism to organism.

Explain the importance of producers in the food chain.

Producers are the main organisms that can use the sun's energy to produce energy and provide to other species.