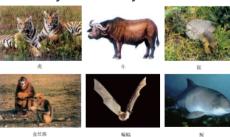
Biodiversity

Introduction to Biodiversity

- **Definition**: Biodiversity refers to the variety and variability of life forms within a given species, ecosystem, or planet.
- **Importance**: It is crucial for maintaining ecological balance, supporting human life, and ensuring the survival of species.
- **Objective**: Understand what biodiversity is and why it matters.



The Value of Biodiversity

- **Direct Value**: Provides resources such as food, medicine, and raw materials.
- **Indirect Value**: Supports ecosystem services like pollination, water purification, and climate regulation.
- **Potential Value**: Holds untapped resources for future discoveries and innovations.

Threats to Biodiversity

- Reasons:
- Habitat destruction
- Climate change
- Pollution
- Overexploitation
- Invasive species
- **Impact**: Loss of species, disruption of ecosystems, and potential ecological collapse.

Protecting Biodiversity

- Importance: Protecting biodiversity is essential for:
- Maintaining ecological balance
- Ensuring human well-being
- Preserving genetic diversity
- Measures:
- Establishing protected areas
- Promoting sustainable practices
- Raising awareness and education



Case Study: The Importance of Protecting Coral Reefs

- Role of Coral Reefs:
- · Provide habitat for marine life
- Support coastal protection
- · Offer potential medical discoveries
- Threats:
- Ocean acidification
- Overfishing
- Pollution
- Protection Measures:
- · Limit carbon emissions
- · Enforce fishing regulations
- Reduce pollution



Summary of Key Points

- What is Biodiversity?:
- Species diversity, genetic diversity, and ecosystem diversity
- Why is it Important?:
- Supports ecological balance, human well-being, and future discoveries
- Threats:
- Habitat destruction, pollution, and climate change
- Protection Measures:
- Establish protected areas, promote sustainable practices, and raise awareness

Assignment

1. Design a Poster:

2. Illustrate the concept and content of biodiversity with images and text.

3. Species Report:

4. Choose a species or ecosystem, understand its role, and write a report on its importance.

5. **Group Discussion**:

6. Propose specific protection measures for biodiversity and submit a summary.