

5. Land and Water Use

Starter Quiz · 课前小测

AP Environmental Science

Name: _____ Score: _____

1. The **tragedy of the commons** happens when...

- ☐ individuals overuse a shared resource, ruining it for all
- ☐ a resource is privately owned
- ☐ no one uses a resource
- ☐ a resource grows forever

2. **Clearcutting** is...

- ☐ cutting down all the trees in an area at once
- ☐ planting new trees
- ☐ watering a forest
- ☐ a type of soil

3. The **Green Revolution** was a big rise in food production driven by...

- ☐ high-yield crops, fertilisers, pesticides, and irrigation
- ☐ planting fewer crops
- ☐ stopping all farming
- ☐ moving farms to cities

4. How does heavy **tillage** (ploughing) harm soil?

- ☐ it bares the soil and speeds up erosion
- ☐ it adds new soil
- ☐ it makes rock
- ☐ it has no effect

5. **Irrigation** is...

- ☐ supplying water to crops artificially
- ☐ harvesting crops
- ☐ ploughing the soil
- ☐ spraying pesticides

6. One way to avoid the tragedy is to _____ how much each person can take (rules or limits).

7. Clearcutting destroys habitat, causing a loss of _____.

8. Growing vast fields of a single crop is called _____.

9. When over-irrigation leaves salt building up in dry soils, it is called _____.

10. Covering a whole field with water, which wastes a lot, is called _____ irrigation.

AP Environmental Science

1. **individuals overuse a shared resource, ruining it for all**

The **tragedy of the commons**: each person, acting in self-interest, overuses a shared resource until it collapses.

2. **cutting down all the trees in an area at once**

Clearcutting removes every tree in an area — fast and cheap, but very damaging.

3. **high-yield crops, fertilisers, pesticides, and irrigation**

The **Green Revolution** used new **high-yield** crop varieties plus fertilisers, pesticides, and irrigation to grow far more food.

4. **it bares the soil and speeds up erosion**

Heavy **tillage** breaks up and bares the soil, letting wind and rain erode it faster.

5. **supplying water to crops artificially**

Irrigation supplies water to crops where rainfall is not enough.

6. **limit**

Rules, quotas, or shared ownership that **limit** use can protect a common resource.

7. **biodiversity**

Removing a whole forest destroys the homes of countless species, lowering **biodiversity**.

8. **monoculture**

Monoculture raises yields but reduces variety, so one pest or disease can wipe out the whole crop.

9. **salinization**

Salinization is salt building up in soil from irrigation, making it too salty for crops.

10. **flood**

Flood irrigation is cheap but wastes much water to evaporation and runoff.