

Solutions

Each answer shows the steps, then the **result**.

2.1

- Surface mining removes overlying rock/soil (more habitat damage); subsurface mining tunnels underground (less surface damage)

2.2

- Acidic, metal-laden water from mines that pollutes streams

2.3

- Restoring mined land (soil, vegetation, water treatment)

3.1 B

- lowering their pH and adding toxic metals

3.2

(a)

- Any two: habitat destruction, soil loss, acid mine drainage, tailings pollution

(b)

- Reclamation — replace soil and replant vegetation

3.3

- Water reacts with exposed sulfide minerals to form acid; this acidic, metal-rich water lowers stream pH, which is toxic to fish and other aquatic organisms