

MINING

- Mining is the **extraction of valuable minerals** or other geological materials from the earth from an **ore body, lode, vein, seam, or reef**, which forms the mineralized package of economic interest to the miner.
- Resource extraction involves **any activity that withdraws resources** from nature.
- Ores recovered by mining include metals, **coal and oil shale, gemstones, limestone, and dimension stone, rock salt, and potash, gravel, and clay.**

EFFECTS OF MINING ON THE ENVIRONMENT

- Deforestation and **loss of biodiversity** are major effects of mining. (It destroys forest and wetlands)
- Many mine **require tailings dams to prevent waste being washed into the rivers**. Unethical miners can dispense with the dams, to save costs, resulting in **massive pollution downstream**. In other cases, the tailings dam can overflow, and even breach, during periods of heavy rain.
- Underground coal mining can require the **removal of almost an entire layer of material deep** under the surface.

- Some mining involves the **inadvertent dispersal of heavy metals**, such as lead, into the atmosphere. This can have serious health effects, including **mental retardation in children**.
- Asbestos mining causes the **dispersal of asbestos into the environment**. This will cause deaths among local residents and workers, often several decades later.



WHAT CAN WE DO NOW?

- Find alternative resources.
- Develop **efficient and reliable renewable resources.**
- **Reduce** our use and avoid waste.
- **Reuse** what we can.
- **Recycle** (collect and reuse materials from waste) what we can

E.g.- Hybrid/electric cars, carpool, walk/ride a bike, turn off unneeded lights/electrical appliances, don't let water run, place recyclables in marked containers