

Class 8a: Weathering and mass wasting

Gradational processes

1. Weathering
2. Mass wasting
3. Erosion/deposition

Weathering

- *Weathering*: breaking down of rock

Weathering

- Speed of weathering?
- Bedrock:
- Climate:
- Vegetation:
- Steepness and orientation of slope

Mechanical weathering

- *Mechanical weathering* breaks rocks into smaller pieces

Chemical weathering

- Changes the chemistry of rocks

Karst

Karst: caves and caverns

Karst: aboveground formations

Mass wasting

- Downward movement of material due to gravity

Mass wasting: creep

- *Creep*: nearly imperceptible movement

Mass wasting: flow

- *Flow*: High moisture content

Mass wasting: slide

- *Slide*: Sudden movement of *non-saturated* material

Mass wasting: slide

- Three landscape consequences:

Mass wasting: fall

- *Fall*: Rock goes airborne

Erosion and deposition

- *Erosion:*
- *Transport:*
- *Deposition:*

Aeolian processes

- *Aeolian*: related to wind

Deflation and abrasion

- *Deflation*: removal and lifting of particles
- *Abrasion*: sandblasting or polishing

Aeolian transport

Aeolian deposition