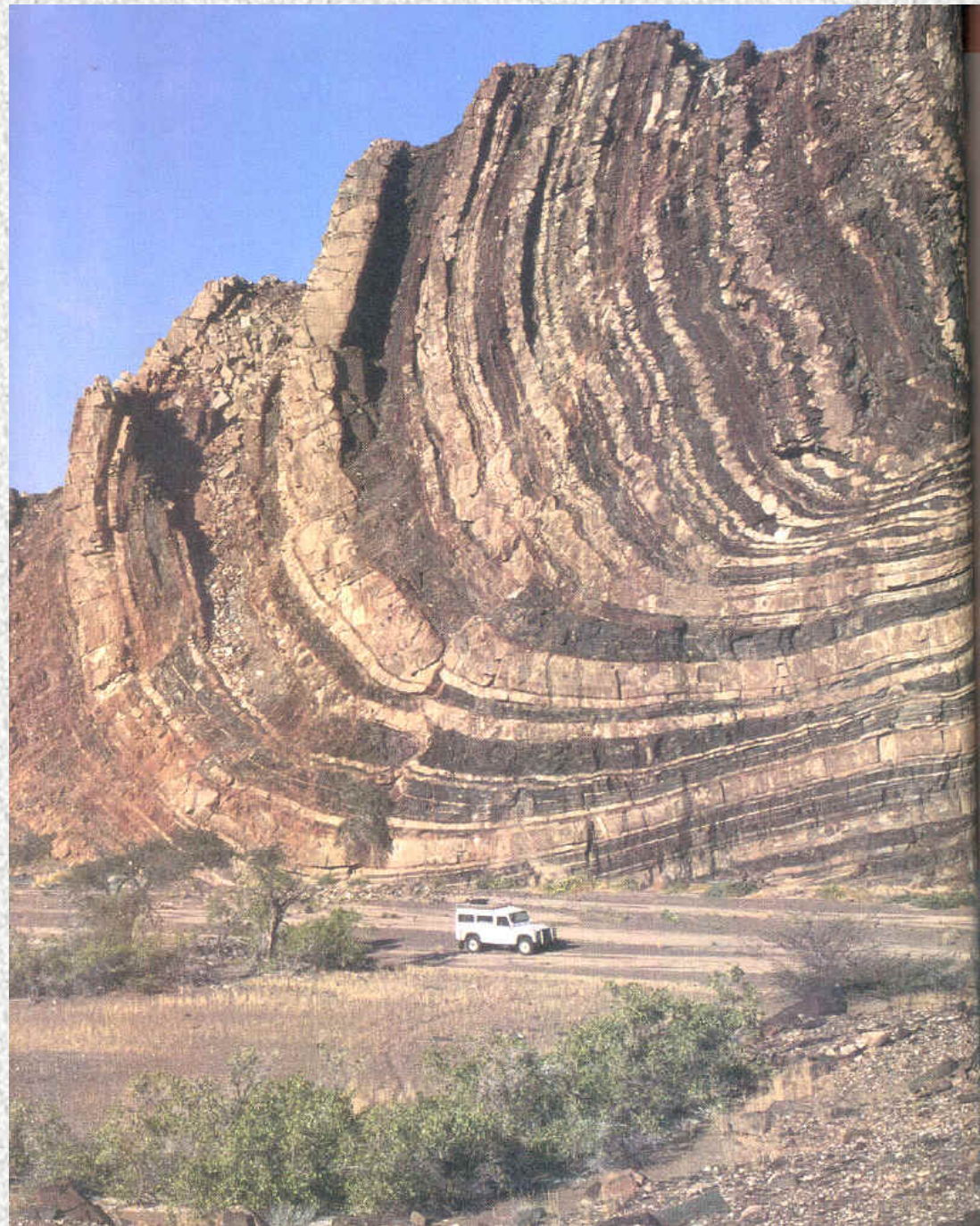


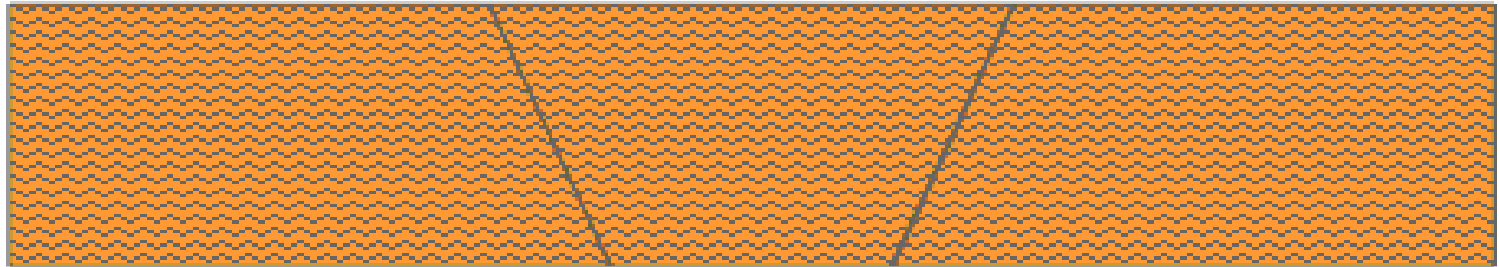
Interpreting Geologic History

Earth and Space Science
Earthcomm: Understanding Your
Environment, pages 53-55

- Geologic events such as deposition, erosion, folding, faulting, uplift, subsidence, igneous intrusion, volcanism, and metamorphism have changed the crust over time.



- Uplift – process where areas of the Earth's crust are slowly raised due to expansion of the surrounding rock layers
- rocks tend to expand when heated



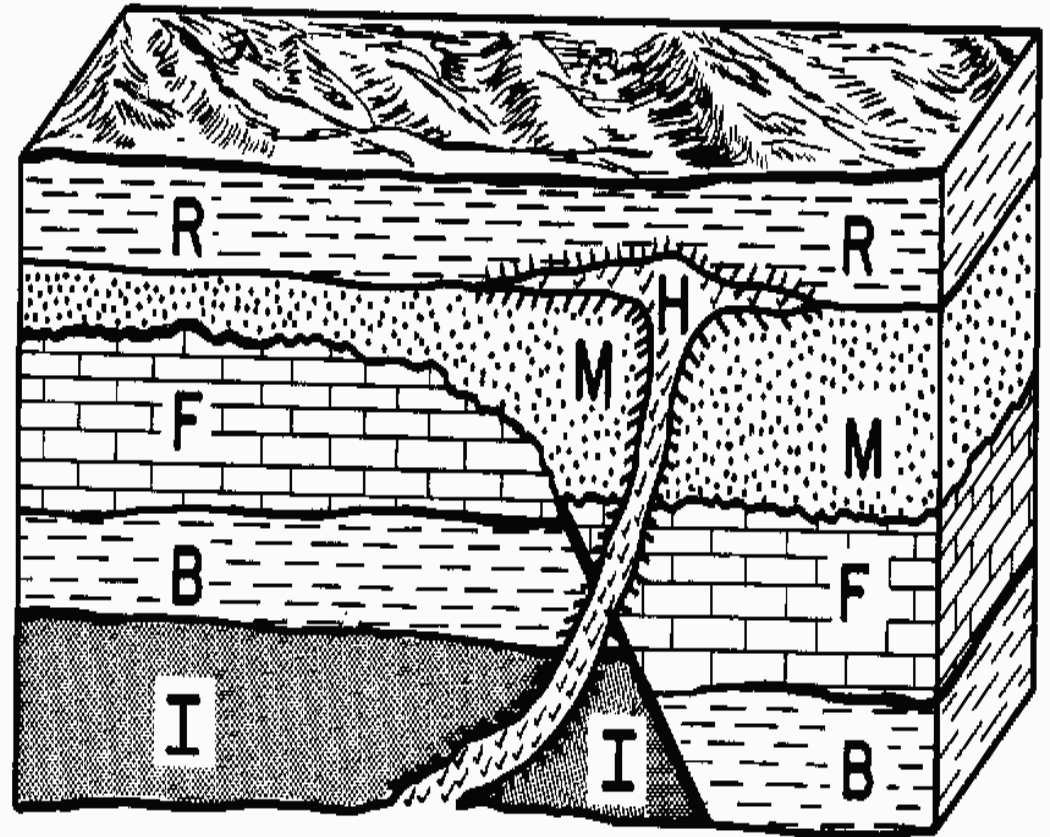
- Subsidence – process where areas of the Earth’s crust slowly sink due to the contraction of surrounding rocks

→ rocks tend to contract when cooled



6 Basic Geologic Principles

- [Check out this website](#)
- [YouTube clip](#)
- [Helpful website](#)



1. Principle of Superposition

- Younger sedimentary and volcanic rocks are deposited on top of older rocks



2. Principle of Original Horizontality

- Sedimentary and volcanic rocks are laid down in approximately horizontal layers



3. Principle of Lateral Continuity

- Sedimentary and volcanic rocks are laid down in layers that are usually much wider (lateral extent) than they are thick



4. Principle Crosscutting Relationships

- If one rock or geologic structure cuts across another rock unit



or geologic feature the cutter is younger than the rock which is being cut

5. The law of included fragments

- The fragments that make up a rock are older than the entire sample.

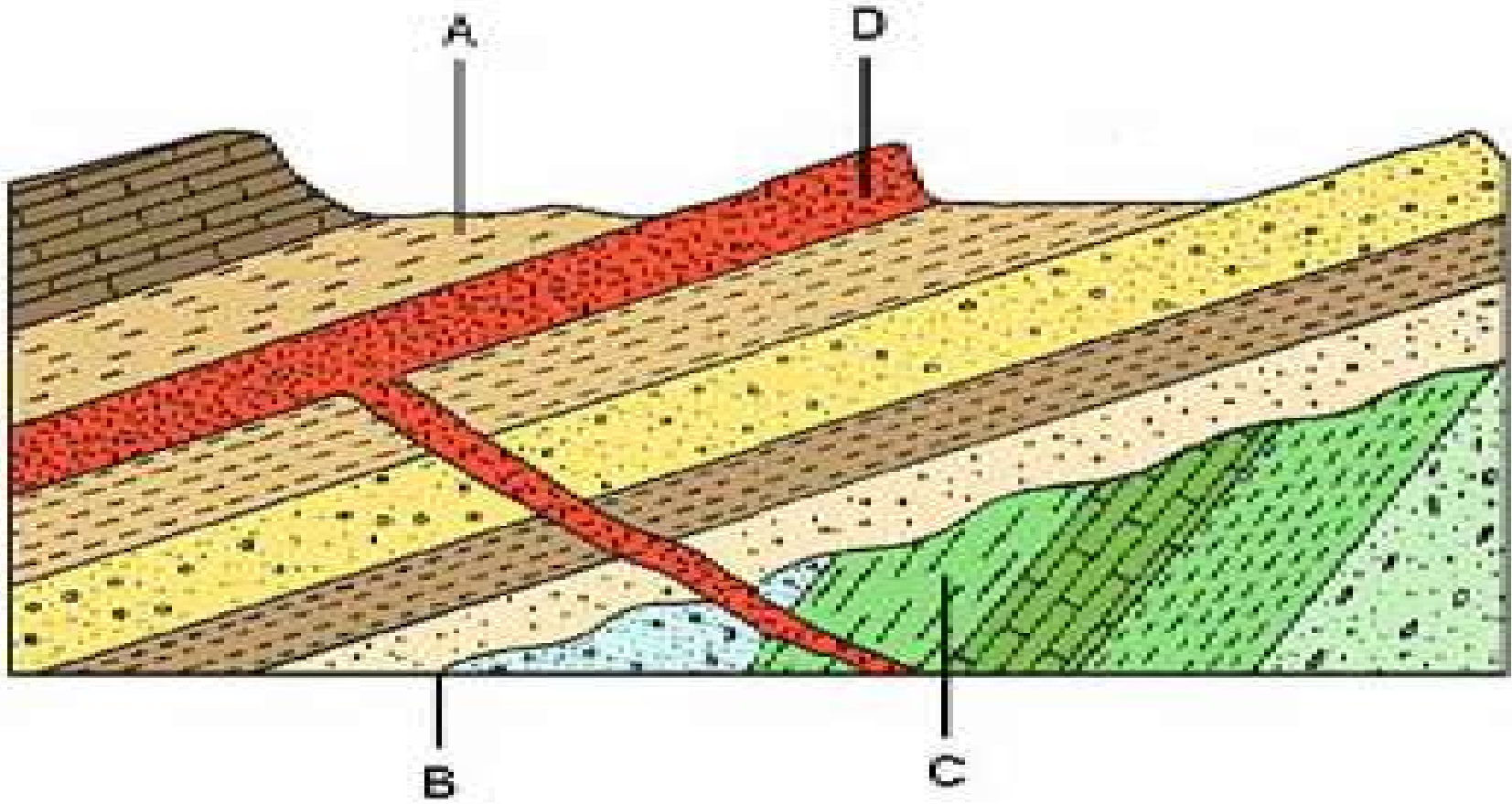


6. The Law of Folds or Tilts:

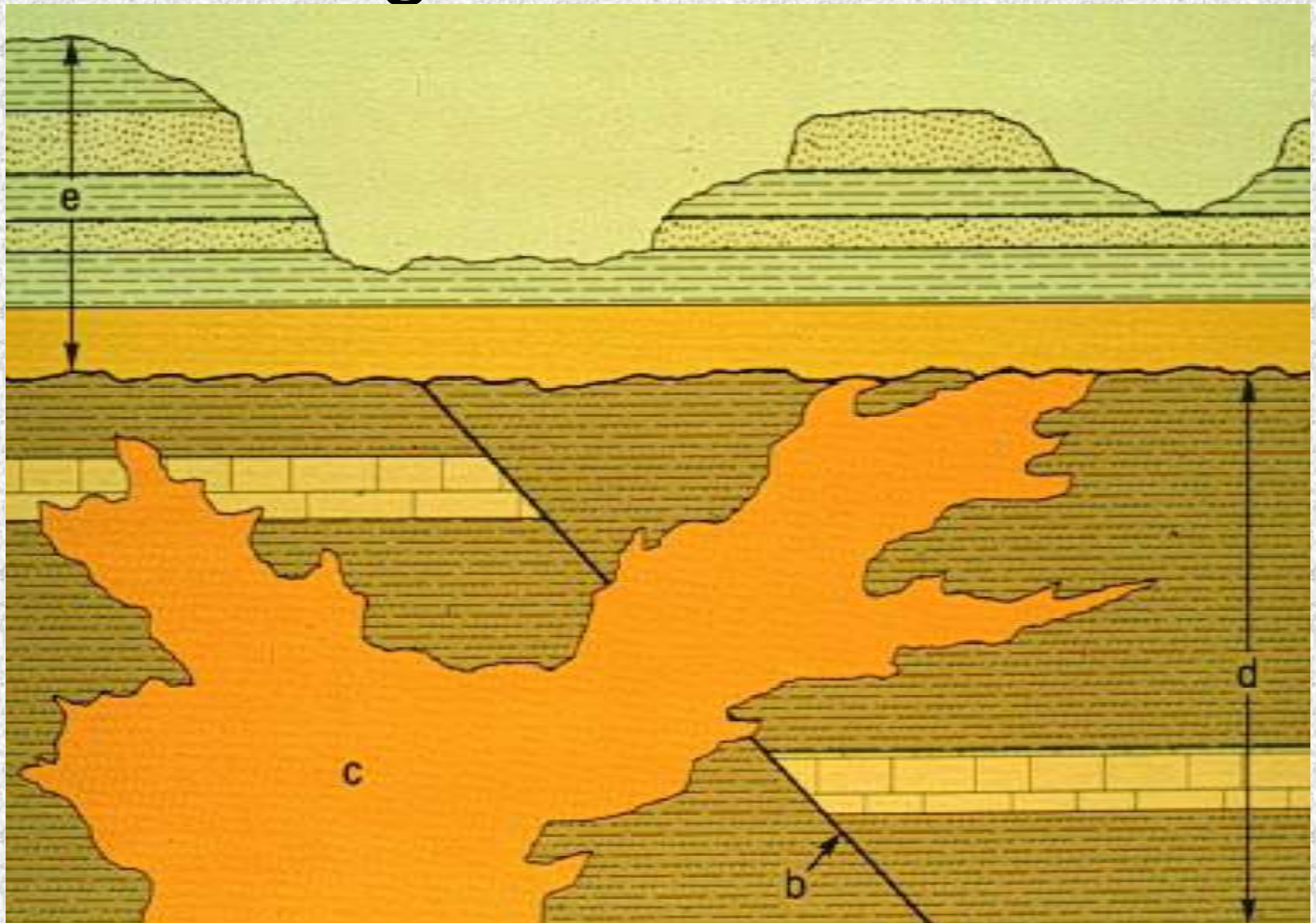
- Tilts in rocks are younger than the rocks themselves.



Geologic Cross-section #1



Geologic Cross-section #2



Geologic Cross-section #3

