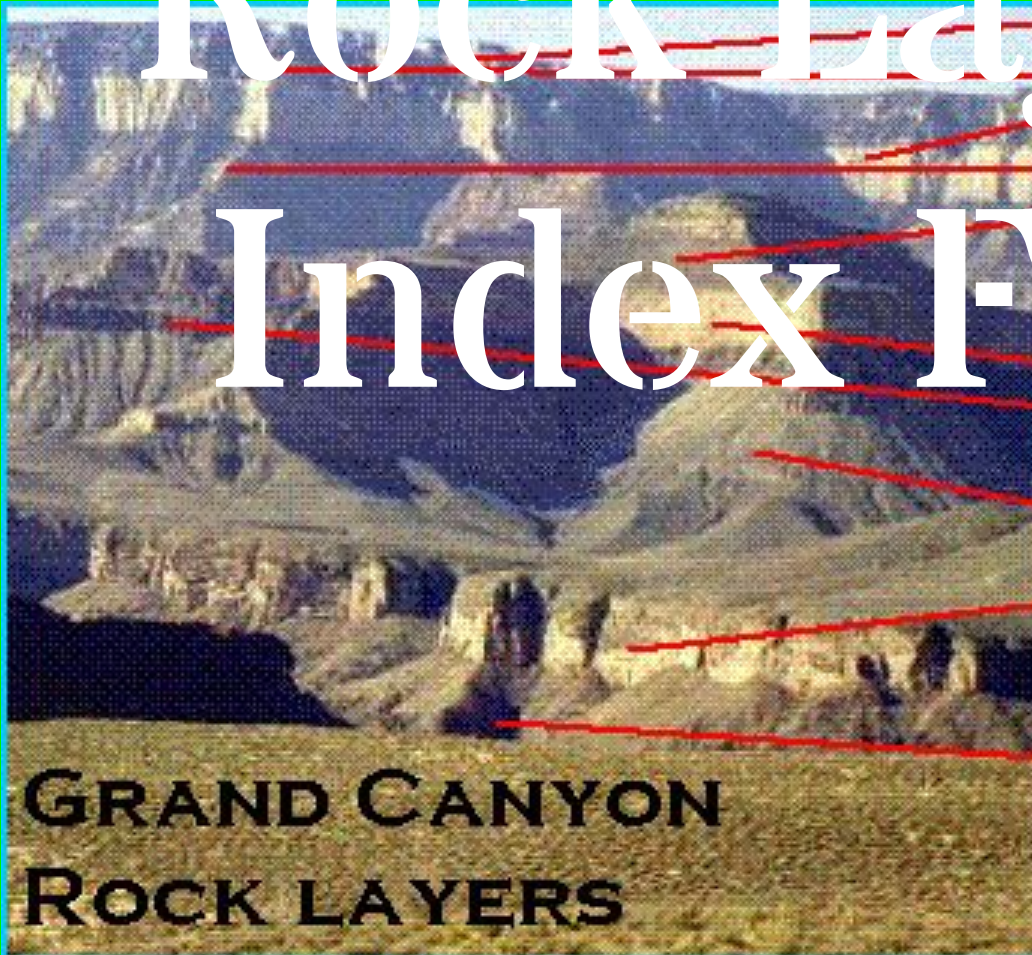
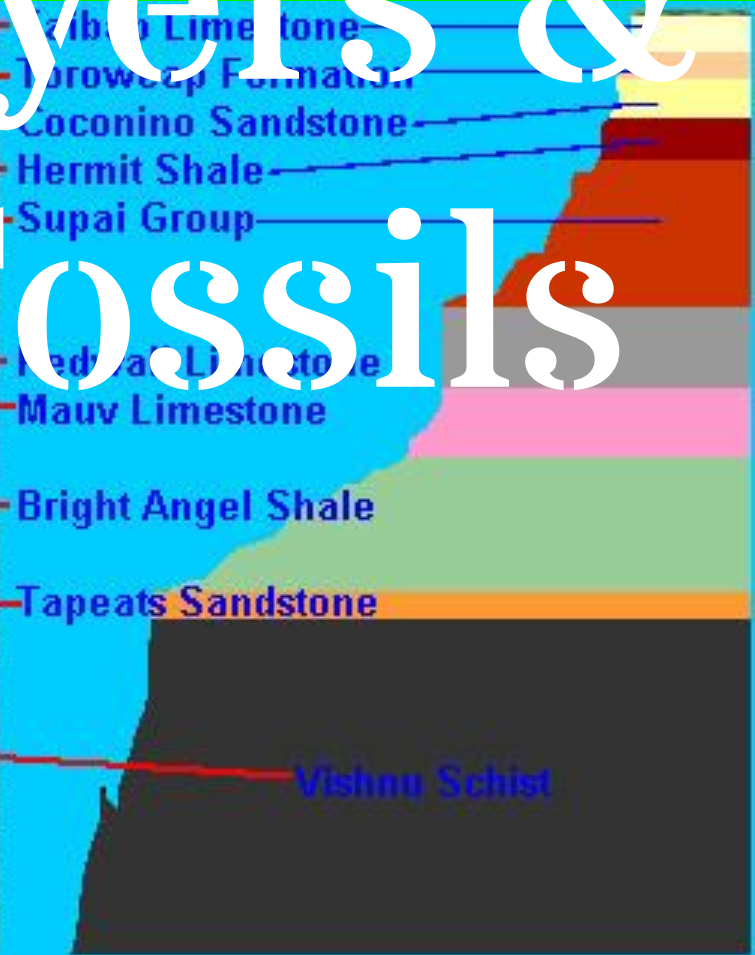


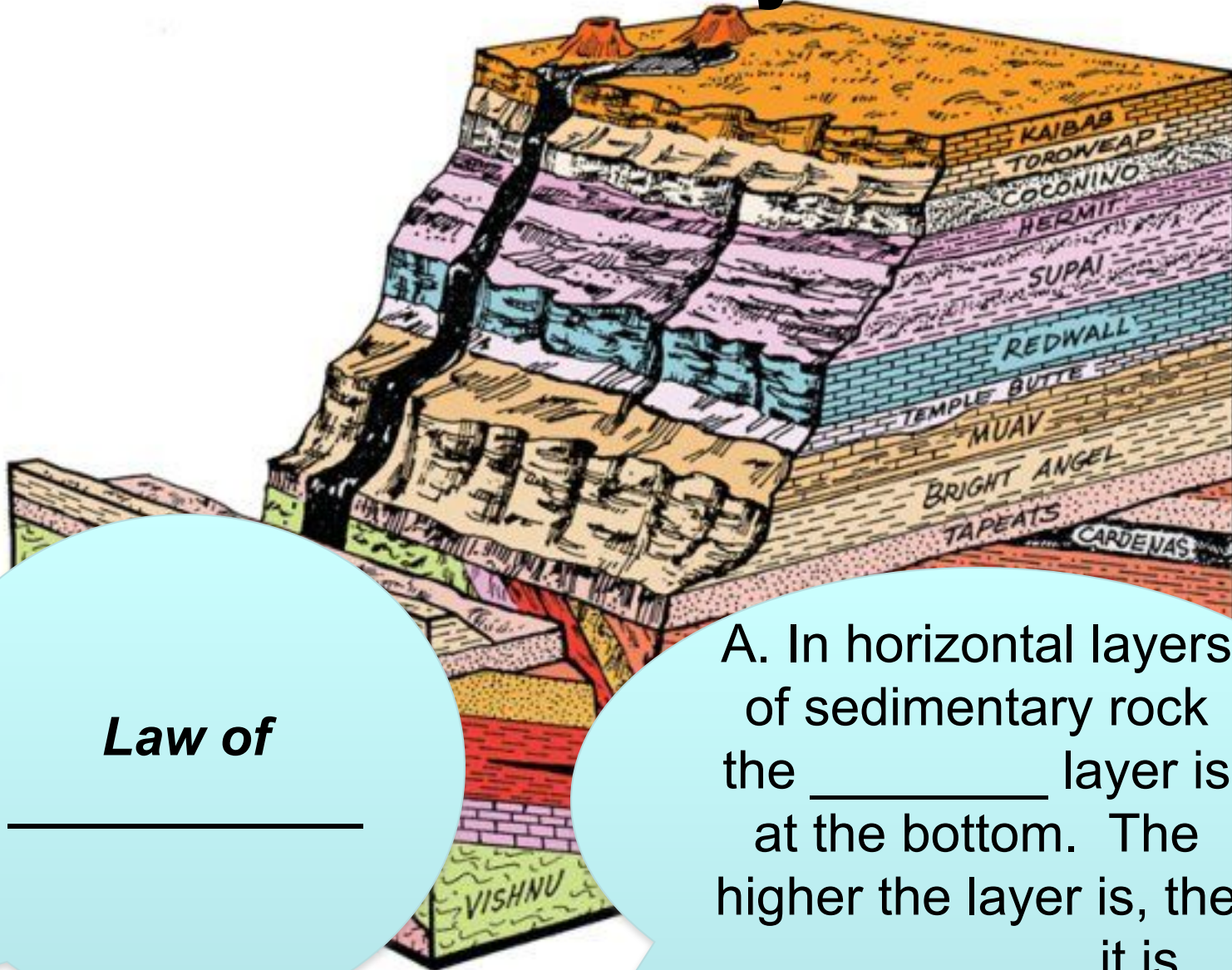
Rock Layers & Index Fossils



**GRAND CANYON
ROCK LAYERS**



Grand Canyon



Law of

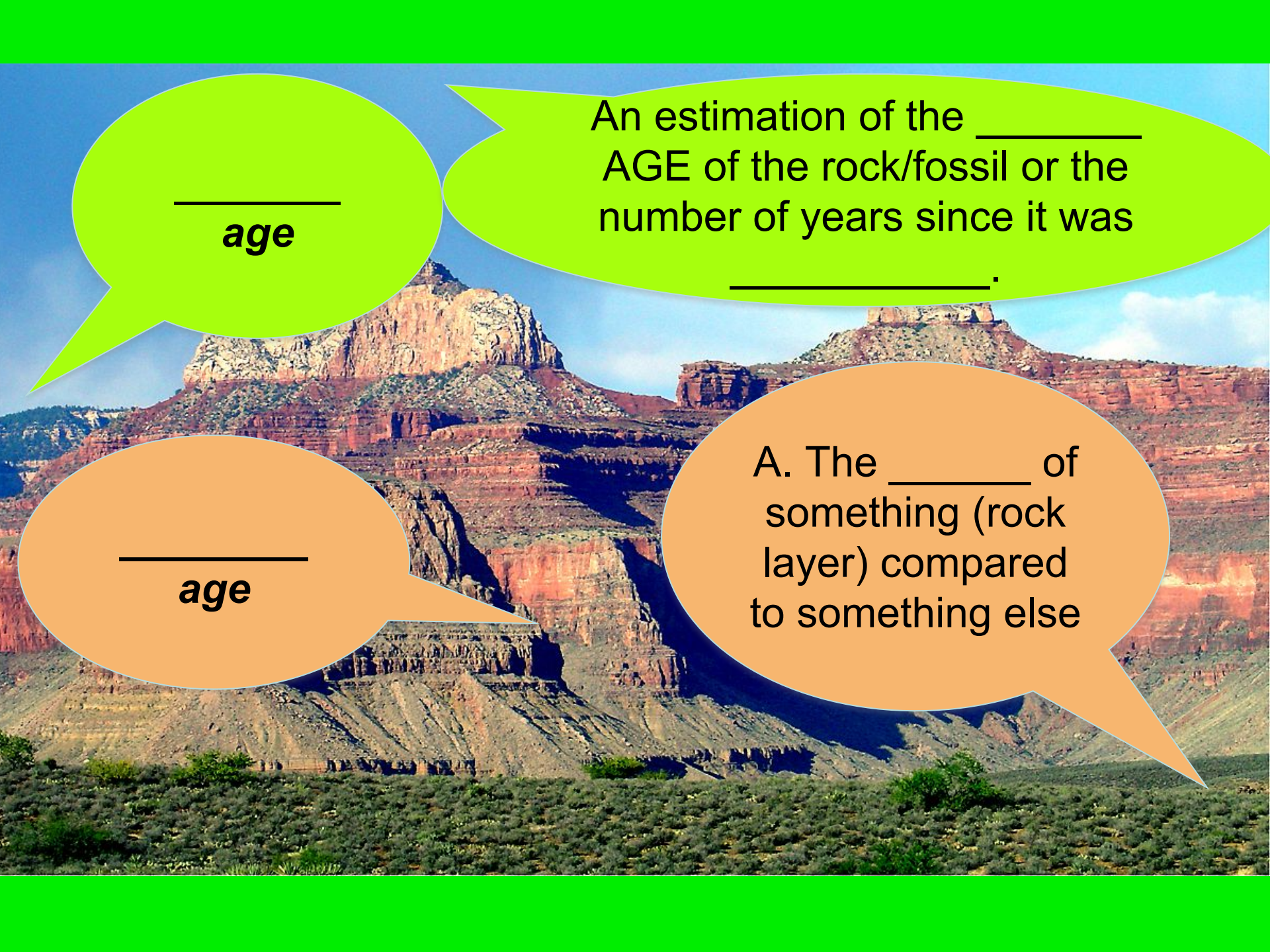
A. In horizontal layers of sedimentary rock the _____ layer is at the bottom. The higher the layer is, the _____ it is.

age

An estimation of the _____
AGE of the rock/fossil or the
number of years since it was
_____.

age

A. The _____ of
something (rock
layer) compared
to something else

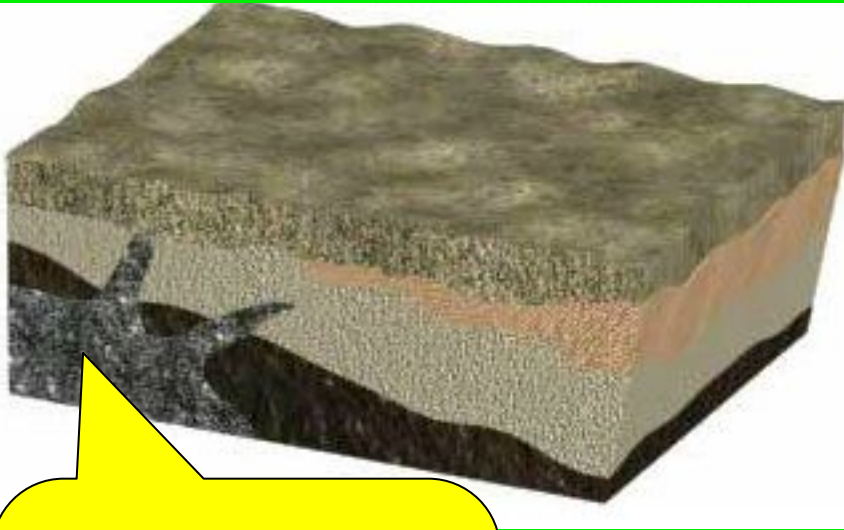


Layers aren't perfect...



CROSS-CUTTING

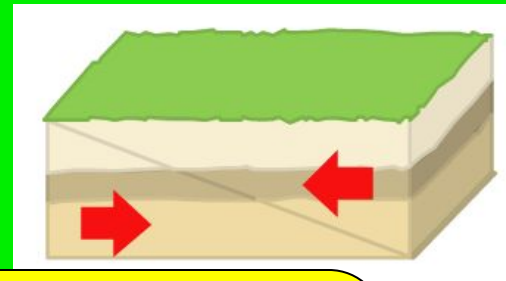
1) Igneous _____



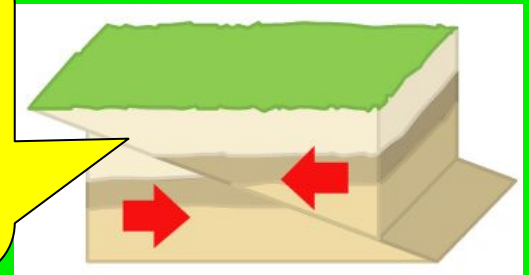
The intrusion is

than the rock it
cuts through

2) _____

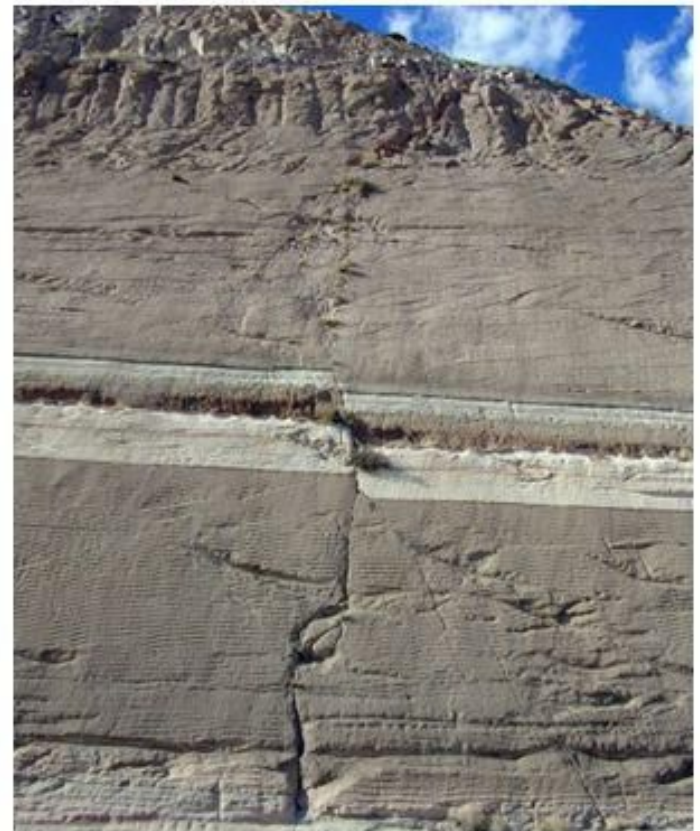
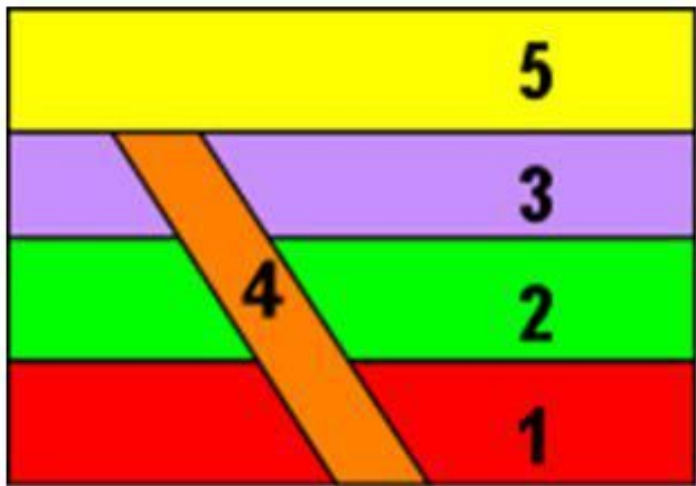


The fault is
_____ than
the rock it cuts
through



- Cross-Cutting relationships

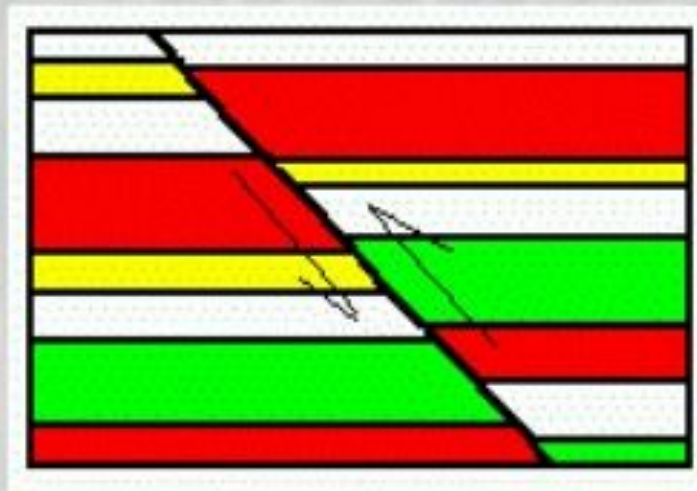
- States that an intrusion or a fault is **younger** than the rock it cuts across



Normal fault cutting across volcanic tuff layers near Kingman, Arizona

Principle of Cross-Cutting Relationships – Faults

Where a fault cuts across a sequence of sedimentary rock, *the fault is* *than the rocks it cuts.*























The sedimentary rocks are than the fault which cuts them, because they had to be there first, before they could be faulted.

fossil







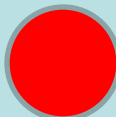


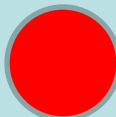
A fossil that is:

- 1) widely distributed
- 2) briefly existing –



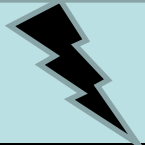
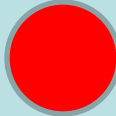





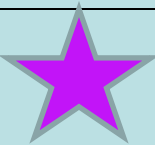
NORTH AMERICA

A				
B				
C				
D				
E				
F				
G				

EUROPE

H				
I				
J				
K				

SOUTH AMERICA

L				
M				
N				
O				

Preview Tonight's HW

