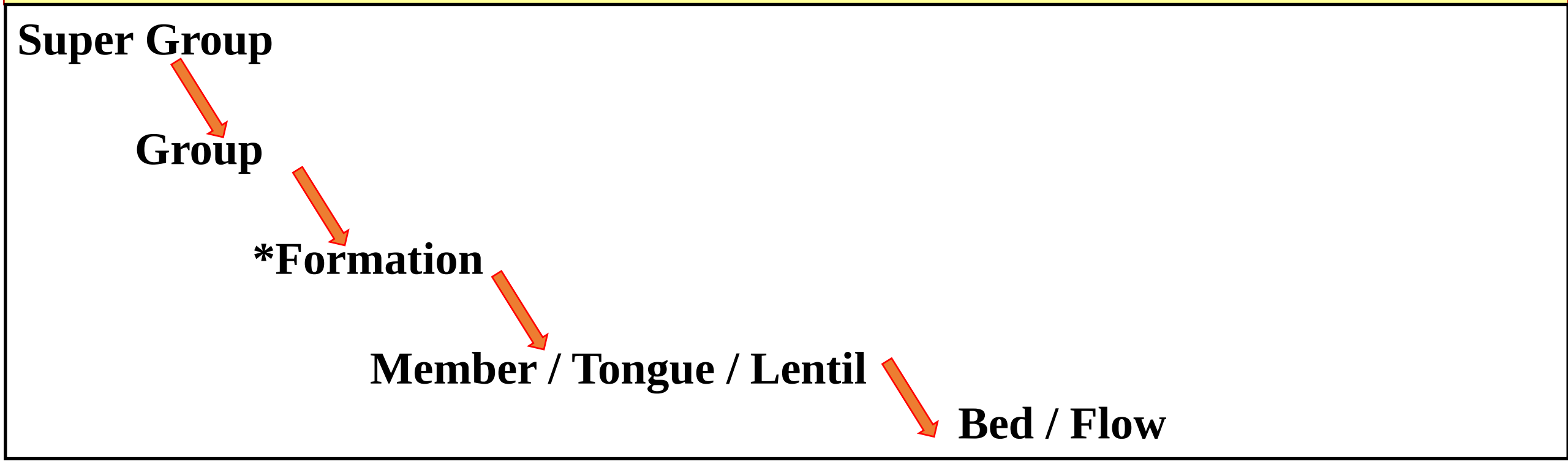
GGY 3030-STRATIGRAPHY
LESSON 2

Types of Stratigraphy

Stratigraphic Categories	Principle Stratigraphic Units and Terms
Lithostratigraphic	Supergroup Group Formation Member Bed
Biostratigraphic	Biozones Assemblage Zone Range Zone Acme Zone Interval Zone Others
Chronostratigraphic (time-rock)	Eonothem: *Phanerozoic* Erathem: *Paleozoic* System: *Jurassic* Series: *Upper Jurassic* Stage: *Tithonian* Chronozone: *Lower Tithonian*
Allostratigraphic	Depositional Sequence (Alloformation) Systems Tracts Parasequences Beds and bedsets
Geochronologic (Absolute Time)	Eon: *Phanerozoic* Era: *Paleozoic* Period: *Jurassic* Epoch: *Early Jurassic* Age: *Tithonian* Chron: *Early Tithonian*

Lithostratigraphic Units

A lithostratigraphic unit is a defined body of sedimentary, extrusive igneous and/or metasedimentary. A lithostratigraphic unit generally conforms to the Law of Superposition and commonly is stratified and tabular in form.



- ***Bed(s).*** A bed, or beds, is the smallest formal lithostratigraphic unit of sedimentary rocks.
- ***Flow***. A flow is the smallest formal lithostratigraphic unit of volcanic flow rocks. A flow is a discrete, extrusive, volcanic body distinguishable by texture, composition, order of superposition, paleomagnetism, or other objective criteria.
- ***Members*** are Subdivisions of formations. They possess characteristics that distinguish it from other parts of the formation. Not all formations are subdivided into members

Formation: is a body of geological material that can be identified by it lithological characteristics and by its stratigraphic position. A formation have some degree of lithological homogeneity and its defining characteristics may include ***mineralogical composition***, ***texture***, ***primary sedimentary structures*** *and* ***fossil content*** in addition to the lithological composition

Formation Characteristics

- Generally considered to be tabular in geometry
- Large enough to be mappable at the Earth's surface or traceable in the subsurface
- Existing formations range from a few m to several 1000s of m thick
- Traceable for a few km or several 1000 km
- Contacts between formations established at obvious lithologic changes (sharp or gradational; lateral or vertical)

***Group**:* is the lithostratigraphic unit next higher in rank to formation; a group may consist entirely of named formations, or alternatively, need not be composed entirely of named formations.

***Supergroup**:* a formal assemblage of related or superposed groups, or of groups and formations. Such units have proved useful in regional and provincial syntheses. Supergroups should be named only where their recognition serves a clear purpose.