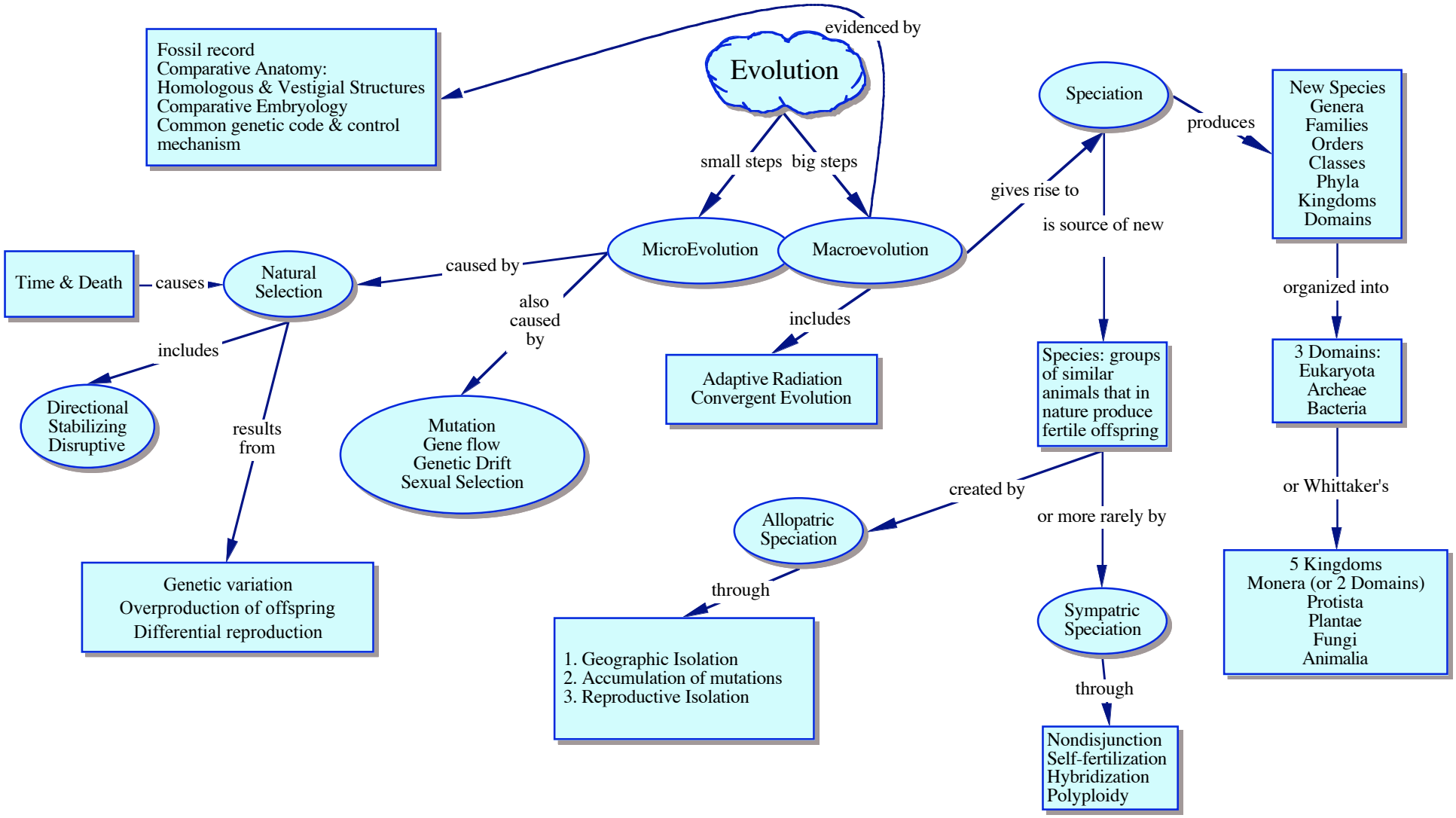
Evolution
evidenced by
Fossil record
Comparative Anatomy:
Homologous & Vestigial Structures
Comparative Embryology
Common genetic code & control mechanism
small steps
big steps
MicroEvolution
Macroevolution
caused by
also caused by
Mutation
Gene flow
Genetic Drift
Sexual Selection
includes
Adaptive Radiation
Convergent Evolution
Natural Selection
causes
Time & Death
includes
Directional
Stabilizing
Disruptive
results from
Genetic variation
Overproduction of offspring
Differential reproduction
gives rise to
Speciation
produces
New Species
Genera
Families
Orders
Classes
Phyla
Kingdoms
Domains
organized into
3 Domains:
Eukaryota
Archeae
Bacteria
or Whittaker's
5 Kingdoms
Monera (or 2 Domains)
Protista
Plantae
Fungi
Animalia
is source of new
Species: groups of similar animals that in nature produce fertile offspring
created by
Allopatric Speciation
through
1. Geographic Isolation
2. Accumulation of mutations
3. Reproductive Isolation
or more rarely by
Sympatric Speciation
through
Nondisjunction
Self-fertilization
Hybridization
Polyploidy