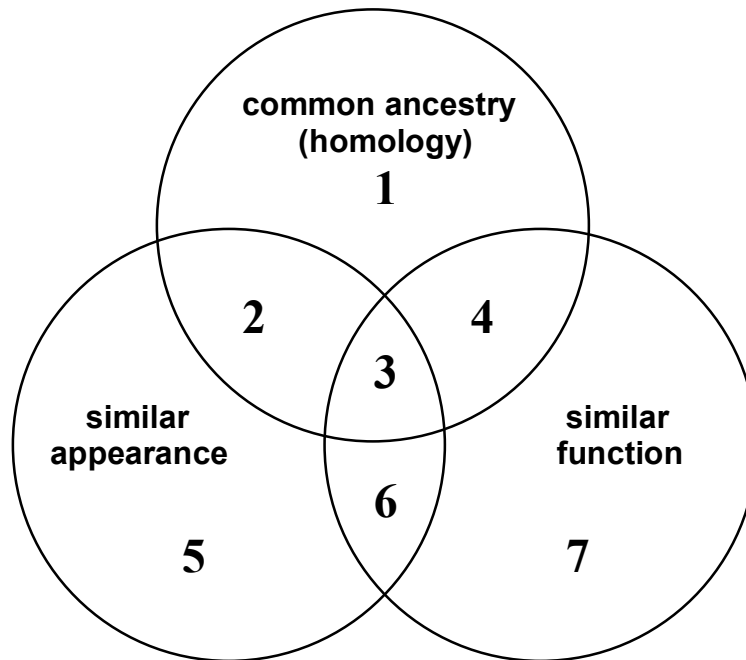


RELATIONSHIPS AMONG COMMON ANCESTRY, SIMILARITY IN FORM AND SIMILARITY IN FUNCTION



HOMOLOGY

1. Shared, common ancestry, but no phenotypic (form and/or function) similarity
- 2-4. Shared, common ancestry with phenotypic similarity (retention of ancestral form, function or both)

HOMOPLASY

- 5-7. Phenotypic similarity due to convergence or reversal (independent origin of similarity)
7. Analogy

EXAMPLES

1. reptile quadrate vs. mammal incus
2. walrus canine (tusk) vs. sabertooth 'cat' canine
3. human femur vs. chimpanzee femur
4. human molar tooth vs. shrew molar tooth
5. dorsal fin of fish vs. dorsal fin of basilisk lizard
6. walrus tusk (canine) vs. elephant tusk (incisor)
7. fish gills vs. mammal lungs

LEARNING EXERCISE:

THINK OF YOUR OWN EXAMPLES FOR 1-7 AND DISCUSS THEM WITH STAFF