

“Modular” Design

Many living organisms seem to be created on a “modular” pattern, consisting of a set of features shared among the entire group, combined with a number of unique features that distinguish each subgroup.



An illustration of modular design

Image: GRI

In the illustration above, each of the four figures have some components, or modules, that are shared with the others, plus one or two unique modules. This illustrates how the same basic design can be adapted for different applications by choosing the appropriate modules.

This is analogous to the situation in living organisms. Species within a higher taxon show a similar pattern of combination of shared modules comprising the “body plan,” together with unique features (modules) that equip them for different ecological roles.