

Lab 23 Invertebrates and Vertebrates

Experiment 2: Creating a Phylum Key

In this experiment you will take a closer look at the characteristics that describe the eight major phyla.

Materials

Table 1

Table 2

Procedure

1. Table 1 contains all of the main features of the eight major phyla discussed in the Introduction. Organize and identify which characteristics belong to which phyla in the key. The number of rows in the key represents the number of characteristics that fall into each phylum.
2. Record your results in Table 2.

Table 1: Phylum Characteristic Table

	1	2	3	4	5
A	Bilateral phylum with segmentation	Most have a calcium containing shell	Five part symmetry	Specialized cell, but no tissues	Mantle of tissue covering the body
B	Hollow body cavity for food	Three tissue layers, no body cavity	Setae used for movement	Jaws and skulls part of evolution	Complete digestive tract
C	Parasites	Water flows through canals of body	The first to have jointed legs	The first phylum to fly	Some have stinging cells
D	More complex because of more DNA	Body design is a tube within a tube	Tube feet	First muscle and nerves	Internal skeleton
E	All live in the sea	Simple animals with bilateral symmetry	Entrance and exit the same in the digestive tract	All have vertebral column	Champions of variations in appendages
F	Has the most species	Have spines covered with a thin skin	Some stationary polyps	Some are mobile medusa	Some propel using their siphon
G	Muscular foot used to move	Stationary animal	Tubular mouth at the mid-body	Humans	Hard but flexible bodies with small plates
H	Spicules are the skeleton	Radula used to feed	No symmetry	Exoskeleton	Their burrowing has affected the global climate

