

You will create a phylum key to increase your understanding of the animal phyla. By organizing the characteristics into eight phyla, you will then have a key to assist you with determining which phylum is represented by the pictures that follow.

Phylum Characteristics Table					
	1	2	3	4	5
A	Bilateral phylum that added segmentation	Most have a Calcium carbonate shell	Five-part radial symmetry	Specialized cells, but not organized into organs or tissues	Mantle of tissue covering the body
B	Hollow body cavity for food	Three tissue layers, but no body cavity	Fluid-filled compartments used for locomotion	Jaws and skulls important in their evolution	Complete digestive tract with two ends
C	Most members are parasitic	Water flows through its body, full of canals	Pioneered jointed legs	First phylum to venture into the air	Some have stinging structures (nematocysts)
D	Increased complexity made possible by much more DNA	Body design basically a tube within a tube	Tube feet used for locomotion	First muscle and nerves	Most have inside skeleton of bones
E	All members live in the ocean	Some of the simplest animals with bilateral symmetry	Digestive tract with the entrance being the exit	All have notochord; most have backbone	Champions of variations in appendages
F	More species than any other phylum	Some spines are little pincers (pedicellaria)	Some non-swimming polyps	Some free drifting medusae	Some propel, using their siphon as a

					water jet
G	Muscular “foot” used to slide, dig or jump	Some spines are little pincers (pedicellaria)	Tubular mouth (pharynx) at midbody	Phylum to which humans belong	Hard but flexible bodies with interlocking plates under their skin
H	Spicules act as a skeleton to give it structure	Feeding device like a toothed, rasping tongue (radula)	No symmetry or consistent body shape	Exoskeleton (outside skeleton) made of chitin and protein	Their active burrowing has affected global climate

*Hints: There are 5 phyla with “Complete digestive tract with two ends”(B5)
There are 2 phyla with “Digestive tract with the entrance being the exit”(E3)
There are 3 phyla with “Bilateral phylum that added segmentation”(A1)

Using the phylum characteristic table and the phylum key worksheet, create a phylum key by writing the characteristics into the appropriate phylum. The number of lines in the key represents the number of characteristics that belong to each phylum. A few have been done for you.

Student Answer Sheet

Phylum Key			
Porifera	Cnidaria	Platyhemintnes	Annelida
1. H3	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
4.	4.	4.	4.
5.	5.	5. C1	5.
	6. _____		
Arthropoda	Mollusca	Echinodermata	Chordata
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
4.	4.	4.	4.
5.	5.	5.	5.
6.	6.	6.	6.
7.			7.

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