Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Heart-to-Heart Assessment: Multiple Choice and Short Answers

1. Hemoglobin and hemocyanin contain hydrogen, carbon, and nitrogen. What element is unique to each of them, and why is this significant to the tinting of blood within spiders in Phylum Arthropoda?
2. There is a unique adaptation within the cardiovascular system of reptiles. What is the name of this system, and how is this different from other organisms?
3. Which of the three listed members of Phylum Mollusca contains a closed-circulatory system? In comparison, what is an ***open***-circulatory system, which is present in the others?
4. True or False: Organisms within certain Phyla do not contain a true circulatory system. If true, give an example of such an organism. If false, explain your reasoning.

Use the space below to answer these questions. They’re pretty short answers!

1. Which of these is **NOT** a structure or component within the Cardiovascular System?

A. Heart

B. Blood Vessels

C. Blood

D. Lungs

1. Phylum Annelida consists of

A. Segmented Worms

B. Parasitic Tapeworms and Flukes

C. Roundworms

D. All of the Above

1. Hemocyanin is a respiratory pigment primarily located within which Phylum?
2. Chordata
3. Arthropoda
4. Annelida
5. Porifera
6. Which Phylum **CONTAINS** a cardiovascular or circulatory system?
7. Platyhelminthes
8. Nematoda
9. Echinodermata
10. Cnidaria

Matching

Use the Glossary, Intro, and Phyla Categories to match these definitions with their words. Just write the words down on the back of the page, or a separate sheet of paper if necessary.

A. Pumps blood into a hemocoel with the blood diffusing back to the circulatory system between cells.

B. A cavity, space, or depression.

C. A cavity or series of spaces between the organs of most arthropods and mollusks through which the blood circulates.

D. The circulatory fluid of certain invertebrates, analogous to blood in arthropods and to lymph in other invertebrates.

1. Any of the openings in the heart of an arthropod through which blood enters.
2. A bluish, copper-containing protein with an oxygen-carrying function similar to that of hemoglobin, present in the blood of certain mollusks and arthropods.
3. The membranous sac enclosing the heart.
4. The iron-containing respiratory pigment in red blood cells of vertebrates, consisting of about 6 percent something and 94 percent something else.
5. The organ that supplies blood and oxygen to all parts of the body.
6. Carries and delivers and removes substances during cellular processes such as cellular respiration.
7. Intricate networks of hollow tubes that carry blood around the body.
8. Transports nutrients and removes gaseous waste from the body.
9. Phylum containing vertebrates.
10. Phylum containing segmented worms.
11. “The spongy Phylum.”
12. Phylum containing flatworms and tapeworms.
13. Phylum containing roundworms.
14. “Joint-legged” Phylum.
15. The mostly symmetrical Phylum of marine animals.
16. Phylum where organisms lack **anything** involving this system whatsoever.
17. Phylum with hemoglyph-containing organisms.