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Interaction among Animal Systems

Directions: **Part 1: (page 1)** Refer to the illustrations of animal systems and name that system. (There is a word bank of systems to assist you.

**Part 2: (page 2)** For each of the following scenarios, **highlight any hints** that help you determine the two interacting body systems. These hints can be hormones, glands, macrophages or any of the following:

1). the system’s function (transport, protect, movement, 1st line of defense, etc)

2). the system’s organs/ tissues (heart, skin, bones, smooth muscle tissue, blood, hair, skin, nails etc)

3). cells that make up a specific animal system (macrophages, red blood cells, white blood cells, etc)

**Word Bank:** Circulatory, Immune, Endocrine, Skeletal, Digestive, Nervous, Respiratory, Excretory, Integumentary, Muscular

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| Highlight the “hints” in each of the following interactions: | Name the two systems (circulatory, immune, etc) | Justify your answer. (What were the hints for system 1? What were the hints for system 2? Refer to the scenario and your highlighted hints. |
| 1. Ingested food is broken down and absorbed nutrients are delivered to cells.  | System 1:System 2: | System 1:System 2: |
| 2. Humans ingest food and muscles control the contractions of many of the digestive organs to pass food along | System 1:System 2: | System 1:System 2: |
| 3. The hypothalamus maintains homeostasis by triggering appetite (stomach growling), digest | System 1:System 2: | System 1:System 2: |
| 4. Deliver O2 from lungs to cells and drop off CO2 from cells to lungs | System 1:System 2: | System 1:System 2: |
| 5. kidneys filter cellular waste out of blood for removal  | System 1:System 2: | System 1:System 2: |
| 6. Tissue transports white blood cells throughout body to fight disease | System 1:System 2: | System 1:System 2: |
| 7. red bone marrow produce blood cells | System 1:System 2: | System 1:System 2: |
| 8. controls pumping of blood (heart)  | System 1:System 2: | System 1:System 2: |
| 9. controls all muscle contractions | System 1:System 2: | System 1:System 2: |
| 10. transports hormones to target organs  | System 1:System 2: | System 1:System 2: |
| 11. Moves oxygen and glucose around the body so cells can do work | System 1:System 2: | System 1:System 2: |
| 12. Nostril hairs trap pathogens | System 1:System 2: | System 1:System 2: |
| 13. During labor, there is an increase of contractions of the uterus  | System 1:System 2: | System 1:System 2: |
| 14. controls body temperature (sweating, goose bumps) | System 1:System 2: | System 1:System 2: |
| 15. white blood cells gather at the site of a wound on the skin causing inflammation  | System 1:System 2: | System 1: System 2: |
| 16. Lymph glands swell because of production of T helper cells. | System 1:System 2: | System 1:System 2: |
| 17. The diaphragm contracts as a result of inhalation | System 1:System 2: | System 1:System 2: |