The purpose of this assignment is to compare the anatomy and physiology related to organ systems between humans & other organisms.

There are 6 phyla listed below. Choose ONE organism from the phylum on the list to compare to a human. Complete the chart for the various organ system comparisons. HONORS (complete the chart for three organisms from three different phyla).

Consider each organ system (i.e., Skin, skeletal, muscle, circulation, respiration, nerves, digestion, endocrine) – what does the organism you chose have that performs a similar function?

Choose one Phylum and one organism in that Phylum:

**Echinoderm – sea urchin starfish sea cucumber**

**Platyhelminth – planaria tapeworm trematode (fluke)**

**Arthropoda – lobster spider grasshopper**

**Cnidaria – sea anemone coral jellyfish**

**Mollusk – snail octopus squid**

**Nematode – hookworm pinworm trichina worm**

At the end list all references used.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Organism & Phylum | Skin | Bone | Muscle | Circulation | Respiration | Nerves | Digestion | Endocrine |
| Sponge, porifera | Epidermis, amoebocytes | Spicules  Calcium carbonate & silica | Mesoglea | Choanocytes or collar cells with flagella | Diffusion | Water transport system & synapses | Filter feeders with spongocoel & amoebocytes | No hormones, but specialized cells |
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Bibliography: