NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ANIMALS PARADE REVIEW

STATION #1
Tell the PHYLA for each of these organisms
 EARTHWORMS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 CRAYFISH \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Look closely at the bodies of these organisms. In addition to both being invertebrate protostomes with a EUCOELOM, what body characteristic is shared by these two phyla ?

STATION #2
These models represent the three kinds of coeloms seen in TRIPLOBLASTIC animals.
(Yellow = endoderm, Red = mesoderm, Blue = ectoderm derived tissue)
Identify the type of coelom.

 \_\_\_\_\_ = eucoelom \_\_\_\_\_ = acoelom \_\_\_\_\_\_ = pseudocoelom

Which of these is found in ROUNDWORMS? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which of these is found in FLATWORMS? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which of these is found in ANNELIDS, MOLLUSKS, ARTHROPODS,
 ECHINODERMS, FISH, AMPHIBIANS, REPTILES, BIRDS, AND MAMMALS?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATION 3
Name the 4 EUKARYOTIC KINGDOMS and compare the cell walls in each.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATION 4
Check your PACKET and the VENN diagrams you made

Tell one characteristic shared by both ARCHAEA and EUKARYA \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tell one way ARCHAEA and BACTERIA are different.

STATION 5
To which phylum does this organism belong? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 Name the characteristics seen in this phylum. Circle all that apply.

 Circulation: open circle

 Adult symmetry: none radial bilateral

 Backbone: invertebrate vertebrate

 Embryonic development: protostome deuterostome

 \_\_\_\_\_\_\_\_\_\_\_\_\_skeleton (See Pin #5)
 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ system with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (See pins #1 & #2)
 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ skin (See Pin #4)

Explain why this organism is placed in the BILATERIA group if it has radial symmetry?

STATION 6
Match the type of reproduction below with the groups of animals below

 A. OVIPARITY B. OVOVIVIPARITY C. VIVIPARITY

\_\_\_\_\_\_\_ Birds

\_\_\_\_\_\_\_ Monotremes

\_\_\_\_\_\_\_ Marsupials

\_\_\_\_\_\_\_ Placental mammals

\_\_\_\_\_\_\_ Humans

Which CLASS of vertebrates shows all three kinds of parity? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATION 7

How is the skin of a reptile different than that of an amphibian?

How does this feature relate to the way these organisms breathe?

STATION 8
Which of these pairs have the closest TAXONOMIC RELATIONSHIP?

A. Earthworm & snake
B. crayfish & tick
C. amoeba & archea
D. dolphin & horse

STATION 9
CRAYFISH belong in the PHYLUM \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the CLASS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which characteristics do they have?

 Circulation: OPEN CLOSED

 Symmetry: None Radial Bilateral

 Backbone: invertebrate vertebrate

 Embryonic development spiral determinate radial indeterminate

 \_\_\_\_\_\_\_\_\_\_ skeleton (See pin #1)

 Breathe with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (#2)

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ appendages (#3)

STATION 10
To which PHYLUM does this organism belong? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organisms in this group are TRIPLOBLASTIC DIPLOBLASTIC

Explain what this means.

Use the phylogenetic tree you competed.
What characteristic separates this phylum from PORIFERANS? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What characteristic separates this phylum from PLATYHELMINTHES and other higher organisms?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATION 11
USE THE HAT PROVIDED TO DEMONSTRATE THE TWO BODY FORMS SEEN IN CNIDARIANS. Draw them in the space below and give an example of each.

Name the one opening digestive cavity seen in this group. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATION 12
Rats are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mammals MONOTREME MARSUPIAL PLACENTAL

Name 2 characteristics share by ALL mammals

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATION 13
Name 3 characteristics of birds visible in this specimen
 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATION 14
Green glands, nephridia, flame cells, and Malpighian tubules are all examples organs that belong to which body system?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What organ do you have that serves the same function as these? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATION 15
Use your notes and look at the hearts of the organisms provided to fill in the chart below

|  |  |  |
| --- | --- | --- |
| ORGANISM | # of heart chambers | # of loops in circulatory system |
| FISH |  |  |
| AMPHIBIANS |  |  |
| REPTILES |  |  |
| BIRDS |  |  |
| MAMMALS |  |  |

STATION 16
The pins in this specimen are marking some of the characteristics of OSTEICHTHYES. NAME THEM.

 1. Integument covered with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 2. Lungs or a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for gas exchange

 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_

 5. \_\_\_\_\_\_\_\_ chambered heart; \_\_\_\_\_\_ loop circulatory system
 2, 3, or 4 1 or 2

STATION 17
Name TWO groups of organisms that are ENDOTHERMIC

STATION 18
To which phylum does this organism belong?

Look at the phylogenetic tree you completed for animals. Which characteristic does this group lack that is seen in all other animals?

What type of symmetry is seen in this group?

19. What evolutionary advancement allowed reptiles to move into new habitats and not have to return to water to reproduce?

20. All vertebrates are deuterostomes and invertebrates are protostomes except \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

21. Clams, oysters, slugs, octopus, and snails belong in the Phylum \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

22. Label the blastopore in this diagram. Tell how the fate of this opening differs in protostome vs deuterostome embryos.

23. Name the 3 germ layers that form in triploblastic embryos and tell an organ that is derived from each.

24. Name the type of development shown in these organisms.