**Nervous System Handout**

I. Multiple Choice

1. \_\_\_ Organisms of this phylum have no Nervous System.

A) Chordata

B) Annelida

C) Porifera

D) None Of The Above

2. \_\_\_ This Phylum is made up of approximately 47,000 different species.

A) Mollusca

B) Nematoda

C) Cnidaria

D) Arthropoda

3. \_\_\_ Which of the following is an example of a Mollusc which has lost its hard shell?

A) Jellyfish

B) Snail

C) Crab

D) Octopus

4. \_\_\_ Which of the following is not a Vertebrate?

A) mammals

B) fish

C) birds

D) sunflowers

5. \_\_\_ Which of the following is necessary for a creature be considered a chordate?

a) a brain

b) feet

c) a notochord

d) a four-chambered heart

6. \_\_\_All chordates have which of the following?

a) pharyngeal slits

b) endothermic blood

c) an endoskeleton

d) potatoes

7) \_\_\_ Which of the following is not included in Arthropoda?

a) exoskeleton

b) segmented body

c) jointed appendages

d) post-anal tail

8) \_\_\_ What does Arthropoda mean?

a) “jointed leg”

b) “flying beast’

c) “hard shell”

b) “creepy-crawly”

9) \_\_\_ Echinodermata is mostly found

a) Underground

b) In the sky

c) In trees

d) In the ocean

10) \_\_What are grasshoppers classified as?

a) Arthropoda

b) Echinodermata

c) Mollusca

d) Annelida

11) \_\_Does the sea Urchin have a brain?

a) yes

b) no

c) maybe

d) all of the above

12) \_\_Which Phylum has no brain?

a) Echinodermata

b) Arthropoda

c) Chordata

13) \_\_ How to Arthropoda feel?

a) their fingers

b) through their eyes

c) with little hairs on their legs and antennae

d) They don’t feel

14) \_\_ Which animal from Echinodermata has a “distributed brain”?

a) Grasshoppers

b) Sea Urchins

c) Starfish

d) Spiders

II. Matching Column

15.   \_\_\_ Giant Axon

16.   \_\_\_ Cuttlebone

17.   \_\_\_ Polarized Vision

18.   \_\_\_ Sensory Hairs

19. \_\_\_ Distributed brain

20. \_\_\_ Compound Eye (Speculated)

21. \_\_\_ Single nerve Cord

A. Starfish

B. Crab

C. Cuttlefish

D. Octopus

E. Squid

F. Sea Urchin

G. Earthworm

III. Fill In The Blank

22. Anthozoa, Hydrozoa, and Scyphozoa are members of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phylum, and live in a fresh or saltwater habitat.

23. Annelida, also known as \_\_\_\_\_\_\_\_\_\_   \_\_\_\_\_\_\_\_\_\_ , are made up of over 17,000 species and are found in both terrestrial and aquatic environments.

24. The Starfish, Sea urchin, and Sea Cucumber are only a few examples of  \_\_\_\_\_\_\_\_\_\_ symmetry, a trait expressed by all adult members of the Phylum Echinodermata.

25. The nervous system is made up of a nerve ring that is made of four \_\_\_\_\_\_\_\_.

IV. True or False

26. \_\_\_ Arachnids convert sensory signals from leg hairs into electrical/sound waves

27. \_\_\_ The nerve ring of a Sea Cucumber plays  no role or function whatsoever, and the Sea Cucumber can function the same without it.

28. \_\_\_ Many octopi have color vision, although some are missing this trait.

29. \_\_\_ Fish can see color as well as we can.

30. \_\_\_ Birds have 23 spinal nerves making up their nervous system.

31. \_\_\_ A wolf’s sense of smell is the same as a human’s.

32. \_\_\_ The subphylum vertebrata includes potatoes and worms

33. \_\_\_ Humans are vetebrates

34. \_\_\_ \_\_\_ There are 8,000 uman nervo

35. \_\_\_ The brain and spinal cord are nin the phylum Nematoda

36\_\_\_ Chordata possess a post-anal tail at least once in their life cycle.

37 \_\_\_ All chordates have a spinal cord or something similar to it.A

38. \_\_\_ All chordates do not have pharyngeal slits.

39. \_\_\_ Echinodermata are comprised of land animals.

40. \_\_\_ Sea urchins have a larger brain capacity than humans.

41. \_\_\_ Sea urchins are sensitive to light, touch, and chemicals.

42. \_\_ Sea cucumbers have many distinct sensory organs

43. \_\_ Grasshoppers have tympanal organs for sound reception.

44. \_\_ Sensory neurons or organs are found near the exterior of the body of a grasshopper.

45. \_\_The Nemopilema Nomurai can grow up to 6.6 ft and 440 lbs.

46. \_\_\_ Jellyfish have no brains.

47.  \_\_\_ The Nemopilema Nomurai are able to feel their surroundings with their epidermis.

48.  \_\_ Sea coral have a very complex nervous system.

49. \_\_\_ The tentacles of the Tubastrea Coccinea act as whiskers, or hairs, to tell what the environment around the coral contains.

50. \_\_\_ Humans possess the most complex nervous system of any known animal.