

NAME: _____

Section Day/Time: _____

Instructor: _____

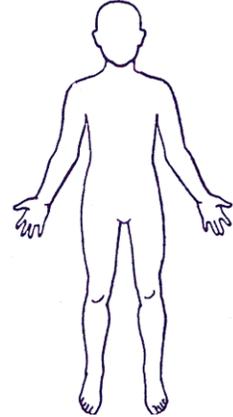
BODY WORLDS PULSE (2017) EXHIBIT

WRITTEN BY PROFESSOR ISABEL STIERLE

First floor:

Entry way – Ethical review Statement

Your comments on the ethical issues surrounding such an exhibit (you may want to answer this after you have seen the entire exhibit):



Locomotion

1. What is the primary cause for chronic diseases? _____
2. (#613) What is our largest and heaviest organ? _____

Display case (#228)

3. Cross section of bone: What makes bone strong and light weight? (Two tissue types)
a) _____ b) _____

2nd display case (#206 & #227)

4. Fractures: Which bones were fractured in the display?

a) _____ b) _____

5. What tissue make up the skeleton in the fetus?

Note: See the baby's skull.

6. What are ossicles? _____

7. (#201) What is the weight of an adult skeleton? _____

8. (#682) Why can't cartilage be easily repaired? _____

9. (#219) Provide the data based on information about the hand.

	Hand
# of bones	
# of muscles	



10. (#214) Hip replacement –
What is another name for a replacement part in the body? _____

Praying Skeleton

Note: The skeleton's right thoracic cavity viewed from internally. You can see the thoracic pleural membranes.

Tai Chi man

10. Name some of the replacement parts seen on this model:

_____, _____, _____

Spine Exhibit (#212)

14. What type of abnormal curvature is shown? How does this change the spinal column? What affect might this have on the internal organs?

Note: The anterior sacral foramina and the nerves that exit in the inferior direction.

Back Pain 15. Give 4 causes for back pain:

16. When a person lifts a 10 lb weight while bending at the waist, how many pounds of pressure are placed on the back?

Weight matters:

17. What percent of adults and children are considered obese/overweight in the US?

Adults: _____

Children: _____

Acrobatic couple

18. Identify the percentage of muscle found in males and females:

	%-age of muscle
Found in Males	
Found in Females	

Chocolate in identifying choice:

19. Does having more choices in life make people happier? Why or why not?

Give evidence from the display as to your answer.

Nervous system (#255, 258) + Poster

20. a. How fast do the signals travel in the nervous system? _____

b. How much surface area is covered by the cerebral cortex? _____

c. (#261) What functions does the brainstem control? _____

Note: View the corpus callosum.

Living Longer

21. What role do free radicals play in the life span? _____

Muscles

22. Approximately how many muscles can be found in the human body? _____

Note: Film on Power of Technology

23a. How many children drop out of school? _____

b. When young males watch over 10,000 hours of video, etc. over their lives, what is the potential risk to the young brain? _____

Nervous System

Note: View the many nerves in display #703

24a) (#252) What serves as an internal shock absorber in the brain? _____

b) What resulted from the brain stem tumor in the middle view? _____

25. (#263) Compare the 2 characteristics of the brain:

a) What percentage of the body weight comes from the brain?	
b) What percentage of the blood supply is utilized by the brain?	

The walker (#693) Note: the sphenoid bone anterior to the sagittal brain sections.

26. What does stress do upon release of hormones?

Gray and White Matter display

27. What role does the cerebral cortex play in the body?

28a. How many dementia cases are associated with Alzheimer's? _____

b. How many Americans have Alzheimer's? _____ # under the age of 65? _____

29. (#409) What medical condition can lead to an enlarged spleen? _____

Emerging skeleton

Note: the Sciatic nerve traversing along the back of the leg. See also the nerves in the hand.

Under Pressure

30. What is considered:

a) normal blood pressure? _____ mmHg b) High pressure? _____ mmHg

31. How many people are at risk for hypertension after age 50? _____ out of _____

3rd Floor displays

Swimmer

32. What internal abdominal organs are visible? _____

Football gladiators

33. At what age do muscles begin to decline? _____

Lungs of a smoker (#324) Note black marks

#304

34. How much fluid is formed annually in the lungs after smoking 20 cigarettes/day?

#305 Note: Emphysema lung

312

35. a) What neurotransmitter is released by smoking nicotine? _____

b) How does smoking accelerate aging?

Poster on 2nd Hand smoking

36. How many U.S. children suffer from bronchitis, pneumonia, and ear infections due to 2nd hand smoke? _____

Limber gymnast

37. If life is out of balance, then what could result? _____

Diet around the World

38. Compare 2 countries (choose 1 from each column) based on their dietary differences: consider food choices, life expectancy, disease.

Column #1	Column #2
Italy	Australia
Japan	Mexico
India	USA

Country 1

Country 2

Digestion

39. a) How many feet long is the digestive tract? _____

b) Approximately how long does food take to pass through the digestive tract? _____

40. (#420) What can cause a stomach ulcer? _____ and _____

Note: Video on cholesterol

41. What are the 2 types of cholesterol? _____

A Chemical Factory

42. How many functions are performed by the liver? _____

Reproductive system

43. What organ exists only during the time of pregnancy? _____



44. What are two possible ways that twins may result?

a)

b)

45. Make any observations or comments regarding the Body Worlds exhibit.
