

Test on Chapters 1, 2, and 3

1. What are the academic disciplines that psychology was built upon?

Psychology was built on philosophy and physiology.

2.) Define the term *Zeitgeist* **and** name three factors that are part of it.

Zeitgeist is a term that comes from the German language. *Zeit* means time and *geist* means spirit. The term refers to the spirit of the times. In other words the term refers to the overarching belief systems and attitudes held by a society at a particular time in history. Three factors that can contribute to the *Zeitgeist* are science, politics, and media.

3.) Define *determinism* and *empiricism*.

Determinism is based on the idea that everything that happens is predetermined by previous causes of that event. In that sense, everything that happens, happens inevitably because of mechanistic cause-and-effect processes. Empiricism is an approach to obtaining knowledge where a general conclusion is drawn based upon repeated observations of the outside world.

4.) What are the differences between John Locke and Rene Descartes in terms of how they believed humans gained knowledge?

John Locke believed that the human mind was a blank slate which would be written upon by the experiences of their life. The two ways which Locke believed that human

beings learn from experiences was through physical sensations and their reflections on those sensations. Descartes, unlike John Locke, believed that humans were born with innate ideas. However, he also believed that humans also came upon new ideas through the senses.

5.) Define the *Spirit of Mechanism* **and** explain why it was important.

During the centuries leading up to the birth of psychology a great deal of interest was taken in machines. There were mechanical dolls in the royal gardens. Watches began to become popular. And machines of different kinds were becoming more part of everyday life in the workforce. Human beings had begun to experience the immediate benefit of machines. Moreover, comparisons began to be made between machines the universe. Some people, such as desists, began to look at the universe as a big clock, and God as the clockmaker. The idea of a clockwork universe eventually came to be applied to the human being as well, as it is a part of the physical universe. Therefore, scientists began to study human beings as if they were a machine.

6.) What was unique about the way that James Mill viewed the human mind **and** what was his goal?

Mill argued that the mind was a machine. His goal was to eliminate all notions of immaterial forces that influenced the behavior of the mind. In his view, the mind was a purely physical machine.

7.) What was the significance of David Kinnebrook's mistake?

It was later discovered that Kinnebrook's mistake was not a mistake after all. An astronomer by the name of Friedrich Bessel found that the mistakes that are sometimes present among astronomers could be attributed to personal differences. This was significant because it implied that personal perceptions of the outside world were not always identical. A person's perception of something could vary from the truth of what the thing is actually like. This pointed more attention to the mind and its subjective experiences.

8.) Why were the early developments in physiology important to the field of psychology?

Early physiologists explored the functions of the different areas of the brain. They also used the scientific method. There was also work being done to study the nervous system. These studies opened the door to a study of what causes us to have the mental experiences that we do.

9.) What was extirpation and of what value was it to psychology at that time?

This was a method by which a scientist would try to learn the function of a specific part of the brain by destroying it.

10.) Why did so many of the early developments in psychology happen in Germany?

The science in Germany was more inductive than in other countries. German scientists were not afraid of observing something repeatedly without being able to come to a conclusion about it. This was the kind of work that was needed in a study

of organisms. Furthermore, biology was more readily accepted in Germany. Germany's view of science was not as limited as it was in other countries. Science in Germany could also apply to studies such as language and history. At the time, Germany also had the financial means to pay for laboratories for scientific research.

11.) What was Hermann Helmholtz's major contribution to psychology?

Helmholtz's major contribution to psychology was his study of reaction times. By studying reaction times in both humans and animals, he was able to show that neural impulses took time to travel and cause a motor response. This showed that thinking and movement did not occur simultaneously.

12.) What is the two-point threshold?

The two point threshold was discovered by Ernst Weber, and it refers to the minimum distance that two points of stimulus need to have in order for them to be perceived as the same touch stimulus. This showed that a person's perception is not always in line with reality.

13.) What is the just noticeable difference?

The just noticeable difference was also discovered by Ernst Weber, and refers to the minimum amount of difference in weight that needs to exist in two weights that a person is holding in order for the person to notice that the weights are not the same weight. This discovery shows that a person's perception can change based upon the intensity of the stimulus that is being presented.

14.) What two ways did Fechner propose for measuring sensation?

The first way proposed by Fechner was to simply determine whether a sensation was present or not. The second way was to measure the intensity at which a sensation would first be perceived.

15.) According to Fechner what does a change in sensation depend on?

According to Fechner, a change in sensation depends on a change in the stimulation.