

Santiago Proano

PSY 101: General Psychology

Dr. Stephen Maret

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## Chapter 2

Question 1: Inductive reasoning is using observations to generalize it (conclusion).

Deductive reasoning is making a conclusion or a generalization about something by backing it up with ideas and facts. This leads to conclusions with inductive reasoning being incorrect or correct. You can use inductive reasoning to predict when a company is going to be live with a presentation with other companies' schedules. You use deductive reasoning to make budgets for yourself. Both are different and both are useful.

Question 4: The difference between a hypothesis and a theory is that a theory is an idea that is developed with explanations and ideas, but a hypothesis is you assume something with little to no research or ideas to back it up. An example of this is the big bang theory and my hypothesis on what soda does to teeth. The big bang theory has been developed and studied for decades. It is a theory that has ideas about our universe that back it up. While my hypothesis on what soda does to teeth is based on my reasoning and what I know. A theory is made to be proven true, while a hypothesis is made to change and worked on.

Question 8: Experimenter bias is when a researcher brings his own bias to the experiment at hand. This leads to untrue results and favoritism in results. This is a dangerous thing to do. A way to fight experimenter bias is to be truthful as possible, You could also try to do a double-

blind study. This helps control the bias of the experimenter and allows the result to remain untouched by bias.

Question 11: Skepticism has an important role in scientific research and is necessary if we want to grow in our thinking. The role that skepticism has is that it helps us experiment by giving us doubt. Doubt helps us try to find the truth in everything. I agree that skepticism is important and necessary. I think that without our world wouldn't have evolved to the way it is. Skepticism helps us think critically about something. It keeps us on our toes.

Question 16: Debriefing is when researchers are allowed to explain the goals of the experiment when deception is. While this may seem to be unnecessary and a waste of time, it isn't. The reason why debriefing after an experiment has concluded is important is that we need the truth. We study and research everything in this world to know the truth and this allows others to understand why deception was necessary. This keeps the quest for the truth in a science honest.

### Chapter 3

Question 31: While genotype and phenotype sound similar, they have a difference that needs to be known. Genotype is the genetic blueprint that could allow the phenotype to be observed. A phenotype is a carbon being's characteristic (usually to the physical side of

someone). For example, a genotype of a building is the materials for it while the phenotype of a building is the blueprint of the building. With the blueprint, you see its physical features of it.

Question 33: Chromosomes, DNA, and genes are the building blocks of all organisms. All of these things work together to make up us. Genes make up the DNA. DNA is the strings in the chromosomes. Each work in harmony to make a cell.

Question 34: Glial cells are cells that support the nervous system. While their job is simple, they are important to the body. They allow the nervous system to be well-conditioned at all times. The function of the glial cells is to create chemicals and substances like myelin sheaths to support the nervous system. They allow the nervous system to communicate quickly with the body and mind.

Question 38: The corpus callosum is a thick white fiber put together between the two hemispheres of our mind. The function of the corpus callosum is to allow communication between the left and right hemispheres of our brain. It is like the bridge between two places. It allows information to go to each place.

Question 39: The brain has so many areas that pertain to so many things. For language functionality, two areas are needed. One is the Wernicke's area and the other is the Broca's area. They are both needed when it comes to language. Wernicke's area is used to understand the language spoken to you, while Broca's area is used to speak/produce it. Both work together to allow two-sided communication.