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| **Question 1** |
| **Secrets of the Mind** Dr. Vilayanur Ramachandran, is fascinated by patients who have unusual abilities or defects in the way they perceive the world. These include such puzzling phenomena as the phantom limb, or the inability to recognize a familiar face following a stroke. In “Secrets of the Mind,” NOVA dramatizes the intimate stories of Ramachandran’s encounters with his extraordinary patients. Based on the video describe the Dr. Ramachandran’s work with these patients:  1. The man who continues to feel phantom sensations in his missing limb:  2. The female stroke victim who has a problem seeing activity on one side of her field of vision:  2. The young man with a head injury who believes his parents are impostors:  4. The young man who has seizures and hallucinations that produce profound spiritual feelings:  Your answers should include a description of the patient’s problem (both the symptoms and the underlying cause), an account of Dr. Ramachandrin’s treatment and his rationale for why the treatment worked.  **Links:**  **Watch the video:**  **Part one:** http://www.youtube.com/watch?v=CTSN9phMZzk  **Part Two:** http://www.youtube.com/watch?v=On7jttGB7pw  **Part Three:** http://www.youtube.com/watch?v=Ry8wwV50ylQ  **PBSWebsite:** <http://www.pbs.org/wgbh/nova/mind/> |

**Question 2**

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| **The Stonewall Uprising**  In the late 1960s, the American Psychiatric Association still classified homosexuality as a mental disorder, and gay men and lesbian women received almost universal moral condemnation from mainstream religions. The act of homosexual sex, even in private homes, was punishable by a light fine, 20 years in prison, or even a life sentence.  In the early morning hours of June 28, 1969 police raided the Stonewall Inn, a popular gay bar in the Greenwich Village section of New York City. That night the street erupted into violent protests and street demonstrations that lasted for the next three days. The Stonewall riots marked a major turning point in the modern gay civil rights movement in the United States and around the world.  **Links: Watch the Video:** <http://video.pbs.org/video/1889649613/>   |  | | --- | | Many of the assignments are not accompanied by specific question; for these assignments use the 3-2-1 format. This includes:   **3** points or important ideas made in the assignments   **2** quotes that relate to these ideas   **1** question raised by the program. This question should be accompanied by an explanation of why this question is important to you. | |

**Question 3**

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| At the age of 30, John Nash, a stunningly original and famously eccentric MIT mathematician, suddenly began claiming that aliens were communicating with him and that he was a special messenger. Diagnosed with paranoid schizophrenia, Nash spent the next three decades in and out of mental hospitals, all but forgotten. During that time, a proof he had written at the age of 20 became a foundation of modern economic theory. In 1994, as Nash began to show signs of emerging from his delusions, he was awarded a Nobel Prize in Economics. The program features interviews with John Nash, his wife Alicia, his friends and colleagues, and experts in game theory and mental illness. Nash was the subject of the “A Beautiful Mind” which was named the best picture of 2001. Based on the video answer the following questions:  1. What is schizophrenia?  2. What are the symptoms of this mental illness?  3. How is it treated today as opposed to during Nash’s time?  4. What type of schizophrenia did John Nash have and how was he treated?  **Links: Watch the video:** http://www.youtube.com/watch?v=oM1SflhJDoc **PBS Website:** <http://www.pbs.org/wgbh/amex/nash/index.html>  **Question 4**  **Ape Genius**  NOVA explores evidence for intelligence and culture among the apes and ponders the question about what differences exist between apes and humans. Based on the video answer and provide examples for the following:  1. Do apes make and use tools?  2. Do apes learn by copying?  3. Will apes cooperate to maximize self-interest?  4. Can apes understand responsibility and intent?  5. Do they exhibit impulse control?  6. Can they empathize?  7. Do apes demonstrate an understanding of symbols and numbers?  8. Can they communicate ideas either verbally or nonverbally?  9. Do they engage in an exchange of ideas and information?  10. Do apes make and use tools?  11. Can apes manipulate items in their environment for a purpose?  12. Can apes comprehend abstract ideas?  13. Are they able to apply previous knowledge to new situations?  **Link:** <http://www.pbs.org/wgbh/nova/apegenius/>  **Question 5**   |  | | --- | | Create your own assignment  Find a website or online video that you think would make a good homework assignment for this class.   * Explain what area of psychology the site or video is relevant to and how it is relevant. * Explain what you like about the site and why it would interest someone studying psychology. * Make a list of 5 questions about the site or video.   **Question 6** | |

**How Does the Brain Work?**

This episode of NOVA scienceNOW delves into some pretty heady stuff, examining magic and the brain, artificial intelligence, magnetic mind control, and the work of neuroscientist and synesthesia researcher David Eagleman. Can we really believe our own eyes? Will machines one day think like us? Can magnetic wands effectively control brain functions and treat depression?

**Link:** <http://www.pbs.org/wgbh/nova/body/how-does-the-brain-work.html>

**Question 7**

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| **Can I Eat That?**  What are the secrets behind your favorite foods? Why are some treats, like chocolate-chip cookies, delectable, while others, like cookies made with mealworms, disgusting? You might think you understand what makes something sweet, salty, or bitter, but David Pogue gets a taste of a much more complicated truth, as he ventures into labs and kitchens where everything from apple pie to Thanksgiving turkey to juicy grasshoppers is diced, sliced, dissected, and put under the microscope. If scientists can uncover exactly what's behind the mouth-watering flavors and textures we take for granted every day, could they help us enjoy our food more—without packing on the pounds?  **Link:** <http://www.pbs.org/wgbh/nova/body/can-i-eat-that.html>  **Question 8**   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **Dog Decoded**  Dogs Decoded reveals the science behind the remarkable bond between humans and their dogs and investigates new discoveries in genetics that are illuminating the origin of dogs - with surprising implications for the evolution of human culture. Other research is proving what dog lovers have suspected all along: Dogs have an uncanny ability to read and respond to human emotions.  Humans, in turn, respond to dogs with the same hormone responsible for bonding mothers to their babies. How did this incredible relationship between humans and dogs come to be? And how can dogs, so closely related to fearsome wild wolves, behave so differently?  Link: <http://topdocumentaryfilms.com/dogs-decoded/>  **Question 9**   |  | | --- | | **TED (Technology Education and Design) Conference**  Watch any of the TED Talks listed below and answer the following questions:  1. Our text book talks about different approaches to psychology. Which approach do you think the speaker represents and why?  2. List three main points the speaker makes during the talk.  3. Give two quotes from the speaker that relate to the main points you have identified?  4. Based on the talk that you listened to what question would you like to ask of the speaker?  **Link:** <http://www.TED.com>  **Question 10** | | One morning, a blood vessel in Jill Bolte Taylor’s brain exploded. As a brain scientist, she realized she had a ringside seat to her own stroke. She watched as her brain functions shut down one by one: motion, speech, memory, self-awareness ... Taylor spent eight years recovering her ability to think, walk and talk. She has become a spokesperson for stroke recovery In her case, although the stroke damaged the left side of her brain, her recovery unleashed a torrent of creative energy from her right. From her home base in Indiana, she now travels the country on behalf of the Harvard Brain Bank as the “Singin’ Scientist.”  **Link:** <http://www.ted.com/index.php/talks/jill_bolte_taylor_s_powerful_stroke_of_insight.html>  Many of the assignments are not accompanied by specific question; for these assignments use the 3-2-1 format. This includes:   **3** points or important ideas made in the assignments   **2** quotes that relate to these ideas   **1** question raised by the program. This question should be accompanied by an explanation of why this question is important to you.  **Question 11** | | | | Susan Savage-Rumbaugh has thrown a monkey wrench into the great debate over intelligence and instinct -- over what makes us human. She believes culture and tradition, in many cases more than biology, can account for differences between humans and other primates. Her bonobo apes, including a superstar named Kanzi, understand spoken English, interact, and have learned to execute tasks once believed limited to humans -- such as starting and controlling a fire. Like human children, the apes learn by watching. “Parents really don’t know how they teach their children language,” she has said. “Why should I have to know how I teach Kanzi language? I just act normal around him, and he learns it.”  **Link:** <http://www.ted.com/index.php/talks/susan_savage_rumbaugh_on_apes_that_write.html> | | | | |

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 **2** quotes that relate to these ideas

 **1** question raised by the program. This question should be accompanied by an explanation of why this question is important to you.

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| **Question 12**  Steven Pinker asserts that not only are human minds predisposed to certain kinds of learning, such as language, but that from birth our minds - the patterns in which our brain cells fire -- predispose us each to think and behave differently. His deep studies of language have led him to insights into the way that humans form thoughts and engage our world. He argues that humans have evolved to share a faculty for language, the same way a spider evolved to spin a web. We aren’t born with “blank slates” to be shaped entirely by our parents and environment.  **Link:** <http://www.ted.com/index.php/talks/steven_pinker_chalks_it_up_to_the_blank_slate.html>  **3** points or important ideas made in the assignments   **2** quotes that relate to these ideas   **1** question raised by the program. This question should be accompanied by an explanation of why this question is important to you.  **Question 13** |
| Despite our best efforts, bad or inexplicable decisions are as inevitable as death and taxes and the grocery store running out of your favorite flavor of ice cream. They’re also just as predictable. Why, for instance, are we convinced that “sizing up” at our favorite burger joint is a good idea, even when we’re not that hungry? Why are our phone lists cluttered with numbers we never call? Dan Ariely, behavioral economist, has based his career on figuring out the answers to these questions.  **Link:** <http://www.ted.com/talks/dan_ariely_on_our_buggy_moral_code.html>  **3** points or important ideas made in the assignments   **2** quotes that relate to these ideas   **1** question raised by the program. This question should be accompanied by an explanation of why this question is important to you.  **Question 14** |
| Daniel Goleman brought the notion of “EI” to prominence as an alternative to more traditional measures of IQ with his 1995 mega-best-seller “Emotional Intelligence.” Since the publication of that book, conferences and academic institutes have sprung up dedicated to the idea. EI is taught in public schools, and corporate leaders have adopted it as a new way of thinking about success and leadership. EI, and one’s “EIQ,” can be an explanation of why some “average” people are incredibly successful, while “geniuses” sometimes fail to live up to their promise.  **Link:** <http://www.ted.com/index.php/talks/daniel_goleman_on_compassion.html>  **3** points or important ideas made in the assignments   **2** quotes that relate to these ideas   **1** question raised by the program. This question should be accompanied by an explanation of why this question is important to you. |
| **Question 15**  **Mirror Neurons**  A recently discovered system in the brain may help explain why we humans can get so worked up watching other people. Explores the role that mirror neurons may play in human actions and interactions and explains how scientists think mirror neurons work. Based on the video answer the following questions:  1. Babies often imitate adult facial expressions. How might mirror neurons be involved in this?  2. Asperger syndrome is a developmental disorder related to autism that impairs language and communication skills. Autism is very complex and  has many symptoms. People with autism may be very intelligent but have difficulty with social interactions. Dr. Ramachandran thinks there may be a connection between mirror neurons and autism. What life experiences might be more difficult for people with Asperger syndrome? What experiences are the same for people with and without Asperger syndrome?  3. Are you convinced, or not convinced, by the evidence presented that there are distinct neurons in the brain that mediate the behavioral phenomenon referred to as mirroring?  4. What evidence is compelling?  5. What additional questions need to be answered?  **Link:** <http://www.pbs.org/wgbh/nova/sciencenow/3204/01.html> |

**Question 16**

**Human Brain Map**

Look over both the structure and function of the various parts of the brain.

Reviewing these thoroughly will help you with the rest of this assignment.

Answer the following questions:

1. What part of the brain processes

negative emotions? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What part of the brain helps you stay balanced? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. What part of the brain is essential for laying down memories? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Link:** <http://www.bbc.co.uk/science/humanbody/body/interactives/organs/brainmap/index.shtml>

**Question 17**

**Obesity**

As Americans grapple with ever-increasing waistlines, science is looking at the biology behind the compulsion to eat. What exactly makes some people weigh 350 pounds and others 150? Researchers have discovered a chemical in your brain proven to regulate body weight, but can pinpointing a “fat gene” signal the road to a remedy?

**Link:** <http://www.pbs.org/wgbh/nova/body/obesity.html>

**Question 18**

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| **Hidden Prejudice**  A simple Implicit Association Test checks what Alan Alda really thinks about women and careers. He’s always thought of himself as a feminist, but does his mind hide a secret prejudice. After watching the video go to the Harvard IAT website and take one of the tests.  1. Do you think this test accurately assess your “hidden” patterns of thought?  Why or why not?  2. Did you learn anything about your own “hidden” motivations? Did you find this surprising?  3. Do you think that knowing something about your personal “hidden” attitudes can help you overcome attitudes that you consciously reject?  **Link:** <https://implicit.harvard.edu/implicit/demo/> |

**Question 19**

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| **Sleep**  Birds do it, bees do it...yet science still can't answer the basic question: why do we sleep? Every creature on the planet sleeps--from giant humpback whales to teeny fruit flies. What does it do for us, and what happens when we go without? We take a peek at iguanas sleeping with one eye open, get in bed with a pair of sleep-deprived new parents, and eavesdrop on the uneasy dreams of rats.  **Link:** <http://www.radiolab.org/story/91528-sleep/> |

**Question 20**

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| **Memory and Forgetting**  This hour of Radiolab, a look behind the curtain of how memories are made...and forgotten. Remembering is an unstable and profoundly unreliable process--it’s easy come, easy go as we learn how true memories can be obliterated, and false ones added. And Oliver Sacks joins us to tell the story of an amnesiac whose love for his wife and music transcend his 7-second memory.  **Link:** <http://www.radiolab.org/story/91569-memory-and-forgetting/> |

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