Scavenger Hunt – Biology and Behavior

1. According to the “No-Brainer” cartoon, what instrument is needed to open a man’s skull?
2. I am a brain wave associated with mental and physical activity.
3. At Duke University, I have been implanted in monkeys and enable them to use their thoughts to control a prosthetic arm to feed themselves snacks.
4. I am used to identify the purpose of single cells.
5. I am just a bit better than the CT Scan. I can do everything a CT Scan can do but without the harmful X-rays.
6. I am a cutting-edge technology used to control prosthetic limbs.
7. By using my brain imaging skills, brain waves can be transferred to useful instruments to control movements for individuals who have lost muscle control. For individuals suffering from paralysis, I can help by tapping into their brain waves and by using these brain waves to create an avatar through which they can experience life.
8. During the imaging process, you may experience a slight burning sensation, a metallic taste in the mouth, and a warm flushing over the body. These sensations are normal and usually go away within a few seconds.
9. I am a dual threat when it comes to brain imaging machines. I capture images of both brain structures – such as the cerebellum – and map their functions.
10. I am a brain wave associated with deep relaxation.
11. I detect changes in the brain in about one minute.
12. When individuals lay down inside of me, they have to stay completely still. If they move at all, the patient will disrupt the brain images I produce.
13. If you use my brain imaging technique, I will need to paste a number of electrodes on your skin and around your skull.
14. If you receive abnormal results from one of my tests, you may have a problem in one of the following areas: seizure disorders, structural brain abnormality, head injury, etc.
15. I produce three types of waves: beta, alpha, and delta waves.
16. I am basically one large X-ray machine. Before I can take X-rays of your body, you must drink an awful tasting liquid substance that looks a lot like blue dye.
17. When making a decision concerning the type of brain imaging machine you should use for your personal brain scan, you should choose me. I have virtually no risks!
18. When I try to “hone” in on brain cells, I become overloaded and hypothetically shut down. With my brain imaging skills, it’s not possible to look at individual cells.
19. I am a brain wave associated with deep sleep.
20. Some critics have compared me to “a high-tech version of phrenology.”
21. I cost a few hundred dollars and can read and interpret conscious and unconscious thoughts as well as emotions. Some people may see me as a potential gaming device.
22. I record brain waves.
23. I am primarily used to identify abnormalities in the central nervous system.