OPTION #1: Neurological Disorder Research Poster

The Big Idea: Design a poster to educate your peers about a neurological disorder of their choosing.

REQUIRED INFORMATION ON THE POSTER

1. WHAT IS IT?
   - 4 points - Describe the symptoms experienced by a person who has the disorder.
   - 4 points - Explain how the disorder is diagnosed.

2. HOW COMMON IS IT?
   - 2 points - Determine how common the disease is.

3. HOW DOES A PERSON GET IT?
   - 3 points - What biological factors influence the chance that the person will get the disorder (age, gender, ethnic background, etc)
   - 3 points - Is there a genetic component to this disorder? Is so, explain.
   - 3 points - Is it influenced by environmental factors?

4. WHAT'S GOING WRONG?
   - 4 points - What fundamentally is going “wrong” in the nervous system to cause the disorder?
   - 4 points - Is a specific neurotransmitter altered in the disorder: if so, which one? Explain how? What does it do or not do?

5. CAN WE TREAT IT?
   - 4 points - Describe current treatments for the disorder.
   - 4 points - Explain how those treatments manage the symptoms or correct the neurotransmitter alteration.

6. HOW DOES IT AFFECT THE LIFE OF THE PATIENT AND THE PATIENT'S FAMILY?
   - 4 points - Evaluate how having the disorder and being treated for the disorder affect the quality of life of a person who has the disorder, and the people who care for them.

7. WORKS CITED
   - 1 point - Use at least three (3) reliable sources.
   - 2 points - Properly formatted works cited list using the Greenwich High School works consulted guidelines (see my wiki page for a copy).
   - 1 point - Tape or glue the works cited to the back of your poster.

** As you are researching and learn that you disease cannot match to one of my questions, then indicate that no research or information has been determined on that matter (ex. Research has shown that “Blah Blah” disease has no connection to genetic factors.) ONLY USE THIS IF YOU ARE ABSOLUTELY CERTAIN**

OTHER FACTORS THAT WILL DETERMINE YOUR PROJECT GRADE

8. VISUAL ORGANIZATION
   - 1 point - Information is typed
   - 1 point - Pictures and diagrams are clear and colorful
   - 1 point - Poster can be easily read

9. TIMELINESS
   - If you poster is handed in on time you will automatically get 4 points towards your project
   - Each day the poster is late, one point will be deducted
OPTION #2: Build A Brain and Compare

The Big Idea: Build a 3-D brain model of an organism and on a poster compare the functions of their brain to a human's brain.

REQUIREMENTS

1. BRAIN MODEL
   - 14 points - Build a 3-D brain model of an organism (not a human) using visual arts media (see my wikipage for a play-dough recipe). Include the following:
     - Frontal lobe
     - Parietal lobe
     - Occipital lobe
     - Temporal lobe
     - Cerebellum
     - Brain Stem
     - Olfactory bulb
   - 4 points - Use a variety of colors to differentiate the various parts of the brain. Include the following:
   - 4 points - Use flagged-toothpicks to label parts of the organism’s brain

2. LABELED DRAWINGS
   - 7 points - On a poster draw your organism’s brain and the human brain. Include of the parts of the brain you used for your 3-D model.
   - 4 points - The brains should be color coded and labeled clearly.
   - 1 point - Include a title for your poster

3. EXPLANATION
   - 10 points - On the poster provide a description that compares and contrasts the two brains. You may include in your explanation parts of the brain that are not found on the external part of the brain (there are internal parts that cannot be shown through your 3-D model). You will be expected to explain why your organism’s brain is structurally different than a human’s brain. Use the following questions to help you:
     - What does your organism do different than humans?
     - How is the organism’s brain built to perform these tasks?
   - 2 points - Layout
     - You can type your description as a whole (one or two paragraphs) and glue it onto the poster
     - Or type and glue short specific descriptions next to each part of your labeled brain drawings.

4. TIMELINESS
   - If you poster is handed in on time you will automatically get 4 points towards your project
   - Each day the poster is late, one point will be deducted