**Case Study Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

A 30-year-old female has had several episodes, separated by several months, in which she experiences brief periods of physical weakness, clumsiness of the legs and hands, visual disturbances in the form of occasional double vision and blurry vision, and mood swings. Her weakness is most prominent in her lower extremities. These episodes typically resolve themselves after a few days but her latest one lasted 3 weeks. MRIs have shown evidence of multiple lesions in the white matter of the brain and spinal cord. During her last episode, there were increasing neurological deficits due to an increasing number of disseminated lesions. Prednisone (60 mg/day for five to seven days) was prescribed and helped her return to as normal and active a life as possible.

1. What are the symptoms this patient is experiencing?
2. What was found with diagnostic testing?
3. What is the difference between white matter and gray matter?

1. What disease is this patient suffering from?
2. What is happening to the myelin in the CNS?
3. What type of drug is Prednisone and how does it help this individual?
4. Besides Prednisone, what are some other treatment options for this patient?
5. What causes this disease?
6. Could this disease have been prevented?
7. Is there a cure for this disease?