



## **SAMPLE LESSON PLANS**

### **Health Smart Virginia - Sample Lesson Plan**

**Grade 8**

**Body Systems**

#### **Nervous System - The Brain**

**SOLs:**

- Identify and explain health concepts to demonstrate an understanding of personal health.
- Identify and describe the major structures and functions of the brain and the nervous system

**Unit Title: The Brain**

**Objectives/ Goals:**

- The student will be able to:
  - Name and identify the major structures of the brain,
  - Identify the protective structures surrounding the brain,
  - Label a diagram of the brain,
  - Describe the major disease and injuries affecting the brain,
  - Explain how to maintain a healthy brain

**Materials:**

- Brain Power Point
- Blank paper
- Color pencils
- Copy of the power point study guide

## **Procedure:**

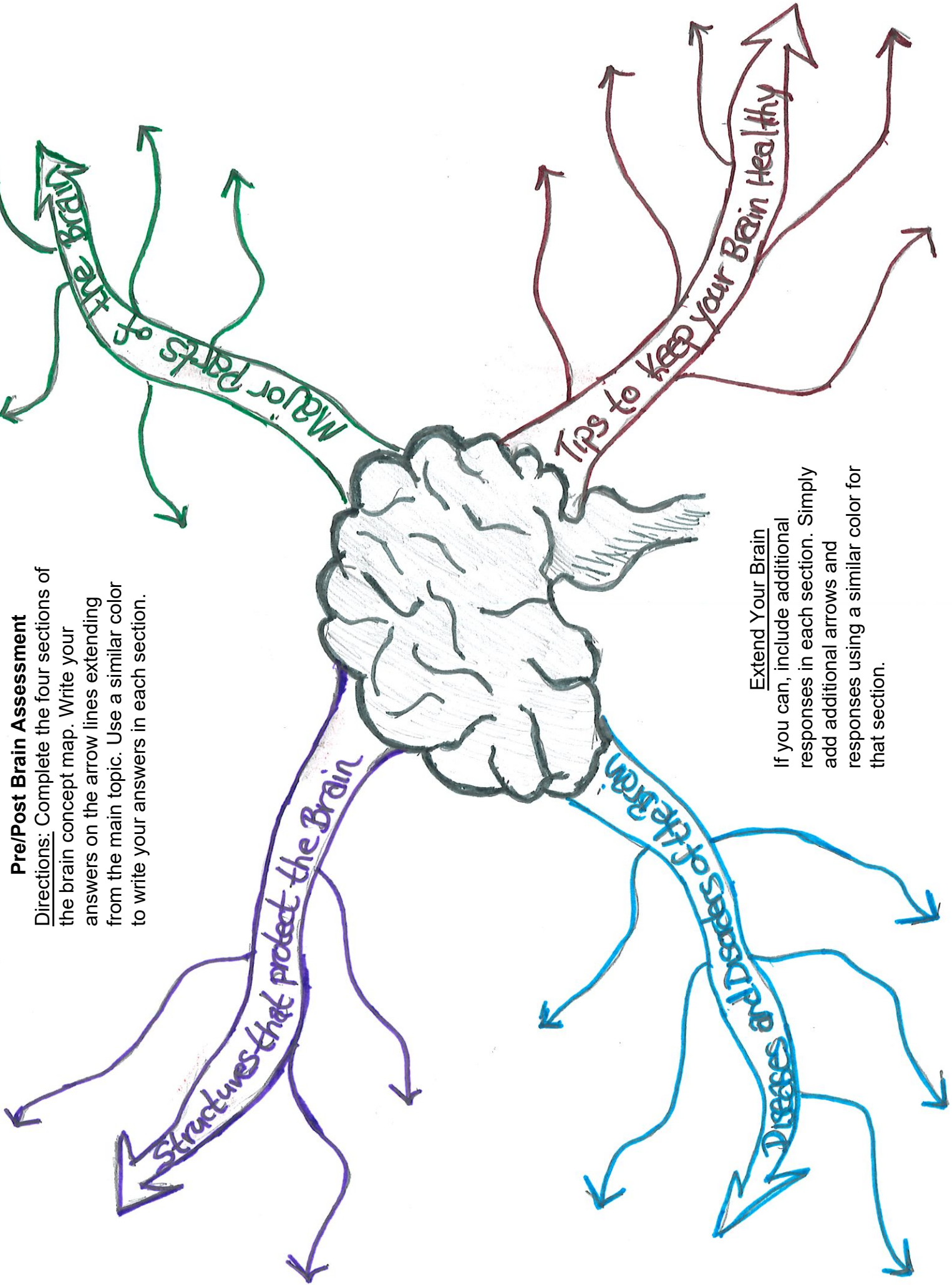
- **Introduction:** Students will complete the Brain concept map pre-assessment diagram.
- **Instruction:** Teacher will review with students the Brain power point presentation,
- **Guided Practice:** Students will complete the power point study guide during teacher presentation.
- **Independent Practice:** Students will create a drawing of the brain and it's major components including the names of the major anatomical components and their functions.
- Students will label each component with a different color and write the anatomical function with the same color.
- Students will create a summary paragraph explaining how to maintain the health of their brain and how they plan to incorporate activities to maintain their brain health.
- **Closure:** Students will complete the post assessment brain concept map activity.

## **Assessments, References & Sources:**

- Brain power point presentation
- Brain power point study student guide hand out
- Student pre and post assessment brain concept map activity
- Student brain diagram activity
- Student brain health summary paragraph.

### Pre/Post Brain Assessment

Directions: Complete the four sections of the brain concept map. Write your answers on the arrow lines extending from the main topic. Use a similar color to write your answers in each section.



### Extend Your Brain

If you can, include additional responses in each section. Simply add additional arrows and responses using a similar color for that section.

# The Brain Power Point Study Guide



## **I. Define and Describe the Primary function of the:**

➤ Parietal Lobe: \_\_\_\_\_

\_\_\_\_\_

➤ Occipital Lobe: \_\_\_\_\_

\_\_\_\_\_

➤ Frontal Lobe: \_\_\_\_\_

\_\_\_\_\_

➤ Temporal Lobe: \_\_\_\_\_

\_\_\_\_\_

➤ Brain Stem: \_\_\_\_\_  
\_\_\_\_\_

➤ Cerebellum: \_\_\_\_\_  
\_\_\_\_\_

➤ Cerebrum: \_\_\_\_\_  
\_\_\_\_\_

## **II. Brain Protectors: Provide a detailed definition**

➤ Skull or Cranium \_\_\_\_\_

➤ Under lying Tissues \_\_\_\_\_

➤ Cerebrospinal Fluid \_\_\_\_\_

## **III. Brain Diseases: Describe symptoms of:**

➤ Meningitis : \_\_\_\_\_  
\_\_\_\_\_

➤ Encephalitis: \_\_\_\_\_  
\_\_\_\_\_

➤ Parkinson's Disease: \_\_\_\_\_  
\_\_\_\_\_

➤ Brain Abscess: \_\_\_\_\_  
\_\_\_\_\_

➤ Alzheimer's Disease: \_\_\_\_\_  
\_\_\_\_\_

➤ Epilepsy: \_\_\_\_\_  
\_\_\_\_\_

➤ Stroke: \_\_\_\_\_  
\_\_\_\_\_

➤ Brain Tumor: \_\_\_\_\_  
\_\_\_\_\_

➤ Autoimmune Conditions: \_\_\_\_\_  
\_\_\_\_\_

➤ Lou Gehrig's Disease: \_\_\_\_\_  
\_\_\_\_\_

IV. **Brain Injuries:** Explain the following, to include mechanism of injury, signs and symptoms following injury and recovery cycle:

➤ Traumatic Brain Injury –

➤ Concussion –

➤ Symptoms of a brain injury -

### V. **Brain Health Summary Activity**

- Write a summary paragraph concerning the ways to keep your brain healthy and young throughout your life.
- Include the ways **you** plan to help keep your brain healthy.
- Provide examples of what you are currently doing to keep your brain healthy.
- Highlight or circle all brain vocabulary words you use in your summary paragraph.

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