Parts of the Brain and Preparation for Visit

Time Frame: 1 session 45 minutes

Materials:

- Books on the brain
- Poster of brain
- Brain poster (teachers have)
- Brain packet
- Glue
- Pipe cleaners
- Pasta (linguini)
- Construction paper
- Cotton Balls
- Glitter
- Markers, crayons and/or colored pencils

Learning Standards:

Life Science

- Recognize that people and other animals interact with the environment through their senses of sight, hearing, touch, smell, and taste.

Skills of Inquiry:

- Ask questions about objects, organisms, and events in the environment.
- Record observations and data with pictures, numbers, or written statements.
- Discuss observations with others.

Student will be able to:

- Name the three main parts of the brain by creating a collage to illustrate those three parts.
- independently research some interesting facts about the brain and be able to present these findings to the class.

Vocabulary:

Anticipatory set (at tables):

There should be books about the brain at each table. The students have 10 minutes to each find a fact about the brain After ten minutes go to rug. The students present their facts in the form of "did you know..."
Still on the rug go over the three main parts of the brain: forebrain, midbrain and hindbrain. Talk about some interesting features of each part of the brain. For example, the hindbrain controls many of the subconscious but essential functions like breathing and balance. The forebrain is the largest section of the brain and controls crucial functions like emotion and hunger. The midbrain controls functions such as vision and hearing.

Activity (at tables):

1. At each table there should be a variety of art materials (listed in supplies).
2. Tell the students that they must use a different material to represent each part of the brain. They will be gluing the materials onto the attached worksheet that has a picture of the brain divided into its three parts.
3. Let the children put their collages together.

Closure: If there is time, the students should look through the brain packet.

Assessment: Participation in activities and class discussion.

Professor Sandstrom and the Human Brain

Time Frame: 1 session 45 minutes

Materials:
- Jellybeans
- Professor Sandstrom should bring most of his own stuff

Learning Standards:
Life Science
- Recognize that people and other animals interact with the environment through their senses of sight, hearing, touch, smell, and taste.

Skills of Inquiry:
- Ask questions about objects, organisms, and events in the environment.
- Tell about *why and what would happen if?*
- Make predictions based on observed patterns.
- Record observations and data with pictures, numbers, or written statements.
- Discuss observations with others.

Student will be able to:
- Explain some of the key functions of the brain. They will gain a better understanding of how the brain works and what it does and furthermore why it is so important to protect your brain.

Vocabulary:

Anticipatory set:
Introduce Professor Noah Sandstrom and his student helpers to the class. This will be a long lab so you should get right into the activities.

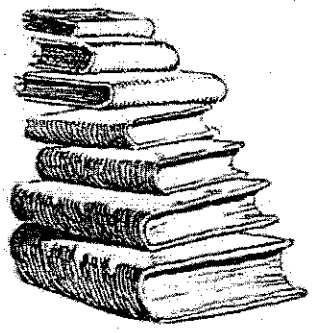
Activity:

1. Split the students into four groups. Professor Sandstrom will have four stations and the different groups should spend a little less than fifteen minutes at each station. Then rotate.
2. The first station will have microscopes set up with slides of the brain. The students should illustrate what they see.
3. Professor Sandstrom will run the second station and will let the students hold the different animal brains.
4. The third station will be at the computer and will be a lesson on optical illusions. This shows us how the brain can play tricks on us.
5. The fourth station will be a lesson on the connection between taste and smell. The students will attempt to identify the flavor of a jellybean while plugging their nose.

Closure: Professor Sandstrom has a demonstration on how the brain is protected in the skull and furthermore how helmets protect the brain when biking.

Assessment: Participation in activities, worksheets and class discussion.

Brain Reading!



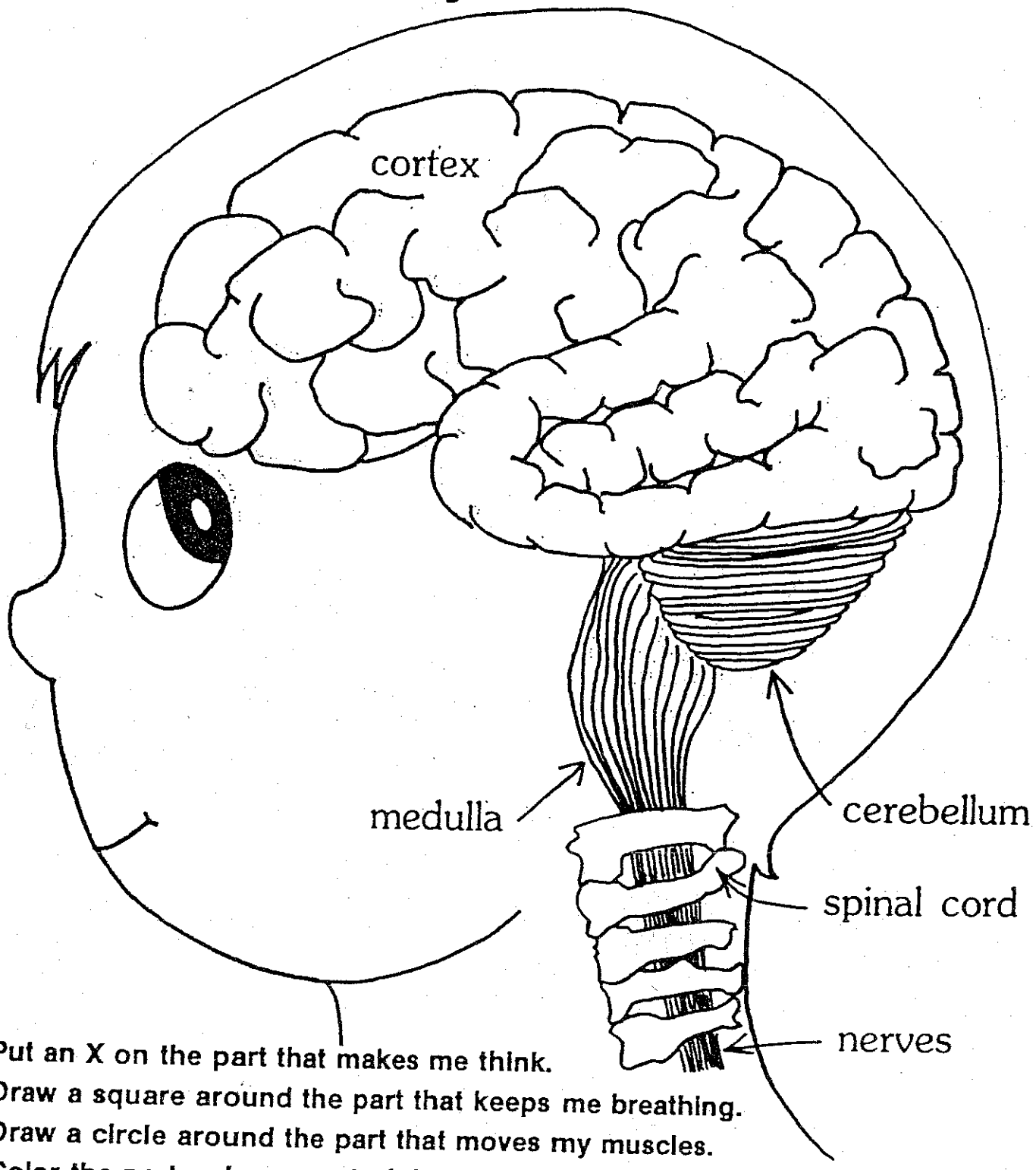
List of suggested books for Brain Unit:

- How does your brain Work? By don L. Curry ISBN 0-516-27853-3

Name _____ Date _____

Review

My Brain



1. Put an X on the part that makes me think.
2. Draw a square around the part that keeps me breathing.
3. Draw a circle around the part that moves my muscles.
4. Color the parts where most of the nerves go through.
5. In blue, color the parts that are "messengers."
6. What do you think the boy in the picture is thinking about?