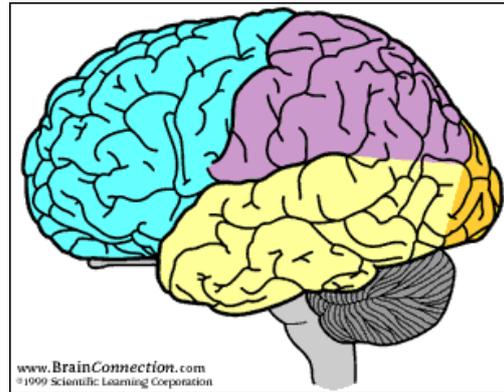


SHEEP BRAIN DISSECTION

Aim: To dissect a sheep brain to identify the main parts of the brain.

Materials:

- Garbage bag for brain waste
- Gloves
- Newspaper
- Dissection board
- Probe, Scalpel and scissors
- Sheep's brain
- Microscope, slides and prepared slide of nerve tissue.



Method:

1. Put on safety goggles, lab coat and gloves. Gather materials.
2. Rinse brain. Make sure that the pieces do not wash down the sink-put them in the garbage bag that is to be used for collecting brain waste.
3. Put brain on newspaper on the dissection board.
4. Make a detailed sketch what you see or use your netbook to take photos to use for your results. Label your diagram. Describe in detail (2-3 sentences) what you see. Be sure to observe all surfaces of the brain.
5. Identify the cerebrum, cerebellum and brain stem. Describe their colour and appearance.
6. Notice that the cerebrum consists of two parts called hemispheres. Use the scalpel to separate the two hemispheres, and then cut the brain in half lengthways. Sketch what you see and write 2 sentences to describe this.
7. Prepare a microscope slide of a smear sample of brain tissue. Use a very thin smear and use a cover slip. Observe and draw your results.
8. Obtain a prepared slide of a nerve tissue (cells). Find a nerve cell and draw and label it.
9. For clean up:
 - Fold the newspaper to enclose all the parts of the dissected brain. Place this into the garbage bag specifically for brain waste. **DO NOT PUT IN THE GARBAGE BIN.**
 - Wash the dissecting board and other dissecting materials with soap and water. **DO NOT WASH THE SCALPEL; THIS WILL BE DONE FOR YOU.** Place the dirty scalpels back into the scalpel tray.
 - Place the dirty slides in the container at the front of the room.
 - Pack up the microscopes.
 - Dry materials and put them back on the trolley or in the tray.

Questions:

1. How did the brain feel? What colour was the brain on the outside and the inside.
2. From your observations how did the appearance of the cerebrum, cerebellum and brain stem differ? How did the sizes differ?
3. Explain the role of each of these components.
4. How would a sheep's brain be different from a human brain?

Write a conclusion to this experiment. Make sure you include:

- Was the aim achieved?
- What was done?
- What were the results?
- What was learnt?
- How could you improve this experiment?