

Section One: The Brain

Lesson One: Learning About the Brain

Objective:

At the end of the lesson, the children should be able to 1) identify where the brain is located, 2) understand some basic functions of the brain, and 3) understand the basic need to protect the brain.



Materials:

Illustration of the body showing the location of the brain, egg or melon, paper towels, large aluminum platter.

Directions:

1. Show the children the illustration of the body. Have children point to their brain. Ask them to knock on their head. "What does it feel like?" "Does it feel like a brain? A skull?" Explain that the hard part of the head is the skull. The brain is inside the skull. The brain is soft and wrinkled and feels like jell-o. The skull's job is to protect the brain. The brain makes it possible to think, walk, talk, play, remember, and feel happy and sad.
2. Show the children the egg or melon. Tell the children the egg or melon is like their heads. The white shell is hard and protects the soft part inside the egg just like their skulls protect their brains. Explain that if they got hurt and scraped their arms or knees, they would probably need a grownup to clean the scrape and put a band-aid over the scrape to keep it clean and help it heal. Then that scrape would be gone in a few days. Explain that if someone broke their arm or leg, that person would need to go to a doctor. The doctor would put the broken arm or leg in a cast. Tell the children it would take a long time to get better.
3. Explain to the children that a doctor can not fix their heads the way that broken bones and scrapes can be fixed. Hold the egg 2-3 feet above the large platter. Drop the egg onto the platter. Ask the children if the egg can be put back together with a band-aid or a cast. Explain to them that a doctor can not put their heads back together either.
4. Explain to children that the shell of the egg or the rind of the melon is a type of protection to keep the egg or melon safe from harm. Ask children if they can think of an animal that also has a type of protection. Possible suggestions would be a shell on a turtle, antlers on deer, and the needles on a porcupine. All of these are protection. We can protect our brain by wearing a helmet.
5. Help children understand how fragile their head and brain are. They need extra protection in certain situations.
6. Tell the children they are going to be learning about ways to keep their brains safe. Tell the children one way to keep their brains safe is to wear seat belts when riding in cars, pickups, vans, and jeeps. The seat belts

hold them in the vehicle in the event of a crash. Another way to keep their brains safe is to wear a helmet when riding a bicycle, scooter or skates.

Alternate version: If food can not be used in the classroom, other fragile items such as a puzzle of a brain may be dropped. A balloon may also be popped to demonstrate how the brain can not be put back together with a band-aid.

BRAIN



Lesson Two: Functions of the Brain

Objective: In order for children to understand why their brain needs to be protected, they need to begin to understand the important functions of the brain



Materials: blindfolds (scarves), familiar objects or shapes (crayon, banana, square block, piece of fur), bag

Directions:

1. Place objects in the bag before beginning the lesson.
2. Discuss with the children that the brain makes it possible for us to think, walk, talk, play, remember, and feel happy and sad. The brain is very important – the most important part of our body. One of the major roles of the brain is our memory. The brain is so smart, it lets us remember things we have seen, felt, smelled, and heard before.
3. Tell children that today they will demonstrate their brain's ability to remember objects they have touched before.
4. With their eyes closed or wearing a blindfold, have children take turns placing their hands into the bag and taking out an object. Ask them to describe what they feel. "Is it hard?" "Is it soft?" "Do you know what it is?" If children have a difficult time, allow them to reach for another item.
5. Discuss with children how they remember things because of their brain. Ask the children to give you a favorite memory. You may start off with a favorite memory of yours. For instance, "I remember the smell of apple pie on Thanksgiving."
6. Explain that our senses (hearing, sight, touch, and taste) all send messages back and forth to the brain. This is what allows our hands to know what it is feeling or our eyes to know what it is seeing. If someone hurts their brain because they fell or were in a crash, they may not be able to remember everything they once did. This is why we need to keep our brain safe. It is sad to not be able to remember your favorite things.

Lesson Three: Brain Art

Objective: As a completion to the series of lessons on the brain, students will discover through communicating, describing, and reasoning that they need their brains for many things.



Materials: large sheets of white paper or poster board and crayons

Background Information:

For this project students will create and present a poster that shows what they have learned about the brain. To help them focus, give them a theme. You (or they) can choose from the list below, or make up another one. When the posters are finished, put them on display. Here are a couple of possible themes:

- I need my brain because _____.
- The most important thing my brain does is _____.
- Every day I use my brain to _____.

Directions:

1. Begin by asking the children:
 - Can anyone name something for which you use your brain?
 - What is the most important thing your brain does for you?
2. Instruct students that they are going to make a poster about how they use their brains. Introduce the theme you have chosen.
3. Allow enough time for students to complete their posters.
4. When the posters are complete, have each child present his or her poster to the class explaining why they filled in the blank the way they did. Hang them on display in the room or around the school.