

## Brain Injury 5<sup>th</sup> Grade Lesson Plans

Time: 1 hour

### Materials:

Brain Poster	4 mirrors
Puzzle Pieces for Poster	4 pens/markers
Skull	1 small poster of words with correct colors
Rubber flesh tone brain	1 small poster of words with incorrect colors
2 button-up shirts	Helmet
2 glasses	Rubber gray brain
10 copies of the star to outline	Water bottle (with a loop on it to hold the cap on)

### I. Intro:

Introduce yourself. (Have the poster of the brain up in the classroom.) What is this a poster of? (The brain) Your entire life adults have told you to wear a helmet. Today I want to tell you why I want you to wear a helmet.

### II. Class:

- A. Show the gray brain and explain what the front, back, left, and right sides. (Great time to go over the right side controls the left side.) Pass the gray brain around the room.
- B. Go over some trivia about the brain while handing out the puzzle pieces to the students.
  - a. The human adult brain weights 3 lbs.
  - b. Bruises, cuts, and breaks all heal. What about the brain does it heal?
  - c. No. Why? The brain is made of 60% fat. Fat does not know hoe to heal.
- C. Ask for each piece by color to come up and place the puzzle piece on the poster.
  - a. Taste and smell – How would your life be different if you could not taste? (favorite food) How would your life be different if you could not smell? (good food cooking, flowers perfume?)
  - b. Hearing – How would your life be different if you could not hear? (music) How would we communicate?
  - c. Vision – yes it is in the back of the head, crazy isn't it? How would your life be different if you could not see? (sports) How would you get around?
  - d. Speaking – How would your life be different if you could not speak? (talking in class) How would we communicate?
  - e. Motor – Do you think you have a car motor in your body? What do you think I am talking about? Have you ever heard of motor skills? Play a quick game monkey see monkey do. How would your life be different if you could not move your right arm, hand or fingers? (writing, sports)
  - f. Emotion – How would your life be different if you could not express the correct emotion? (laughed at sad news) Would it be hard for me to do my job if I all of a sudden became shy?
  - g. Balance – Balance and vision are closely to each other, so your vision will affect your balance. Have student stand on 1 foot. Now have student

- close eyes and stand on 1 foot. Be close incase they start to fall. How would your life be different if you were always that off balance?
- h. Memory – Ask student what there name is. Ask the student their name multiple times; a good example of what it would be like to have short term memory loss. How would your life be different if you lost part of your memory? (forgot you address, who your parents are)
  - i. Think for 30 seconds about how different your life would be like if you lost 1 or more of these areas of your brain. This is a possibility if you injury any of these areas of your brain will have that injury always.
- D. The skull, skin, and hair is all that protects your brain(you can go into cerebral fluid if you want)
- a. This is not a real skull it is a replica of a real one though
  - b. Show me with your fingers how thick do you think the skull is?
  - c. Open the skull and show them.
  - d. Show the students how smooth the top of the skull is and how bumpy the bottom of the skull is. Do you think the bumps could injury the brain?
  - e. Show the students the brain. It is true brain size. Show them that there is a little bit of wiggle room between the brain and the skull and that gives it a bit more protection.(please do not pass the skin tone brain around)
- E. Why wear a helmet? We just went over parts of your brain and what they do for you. If you are not wearing a helmet and injury part of your brain it will be damaged forever.
- a. Look at the thin skull compared to the thickness of a bike helmet. I am estimating that this helmet is 10 times as thick as your skull. That is a lot of extra protection while you are playing hockey, football, baseball, biking, scootering, horse back riding, skateboarding, skiing, or snowboarding.
- F. I would like to show you a few experiments of what is would be like to have a brain injury.
- a. Glasses –
    - i. Pick 1 girls 1 boy (I try to get 1 with glasses because they can have all kinds of crazy things happen)
    - ii. The glasses are the same, 1 nearsighted and 1 farsighted lens. (most kids see double vision)
    - iii. Have the kids put on the glasses and tell the class what they are seeing and how their body is reacting.
    - iv. Have a water bottle sitting on a table 10 feet away. The water bottle needs to have a loop that holds the cap on.
    - v. Make the students go over and lift the water bottle by the loop that holds the cap on using only their pointer finger.
    - vi. This is an example of a vision problem and how difficult life would be if you were seeing double vision always.
  - b. Small poster dealing with color-
    - i. Pick a student that is a good reader and can see color
    - ii. The student will need to read the small poster with 16 words on it were each word is written in the color of the word. Have the

student say the **color** of the word as fast as they can. (This should be easy)

- iii. Have the student then go on to the second poster. Have the student say the **color** of the 16 words (this will be hard); this poster is the poster of the 16 words that are written in a different color.
  - iv. The students will struggle with the second poster this is an example of a speech injury and how frustrating it can be.
- c. Button-up shirts -
- i. Pick 1 boy and 1 girl. Tell the student that they have injured their left side of their brain and no longer can move their right arm, hand, or fingers.
  - ii. Ask them to get dressed for the day. Hand each student a button-up shirt. Make sure they button at least 1 button.
  - iii. This is an example of a brain injury of the motor skills and how simple tasks can become very challenging.

### III. Wrap-up

I have given you many examples of how your life would be different, challenging, and frustrating if you injured your brain. The option is yours to wear a helmet. I can not make you wear the helmet but I hope I gave you the information on why you need to wear your helmet. Remember that a brain injury is injured for life. I hope you make the correct choice. :)