

The Brain

Even though your brain is a **small** part of your body, it can do more jobs than the most powerful **computer** ever made.

Your brain controls:

- sight
- hearing
- smell
- taste
- memory
- breathing
- heart beat
- emotions

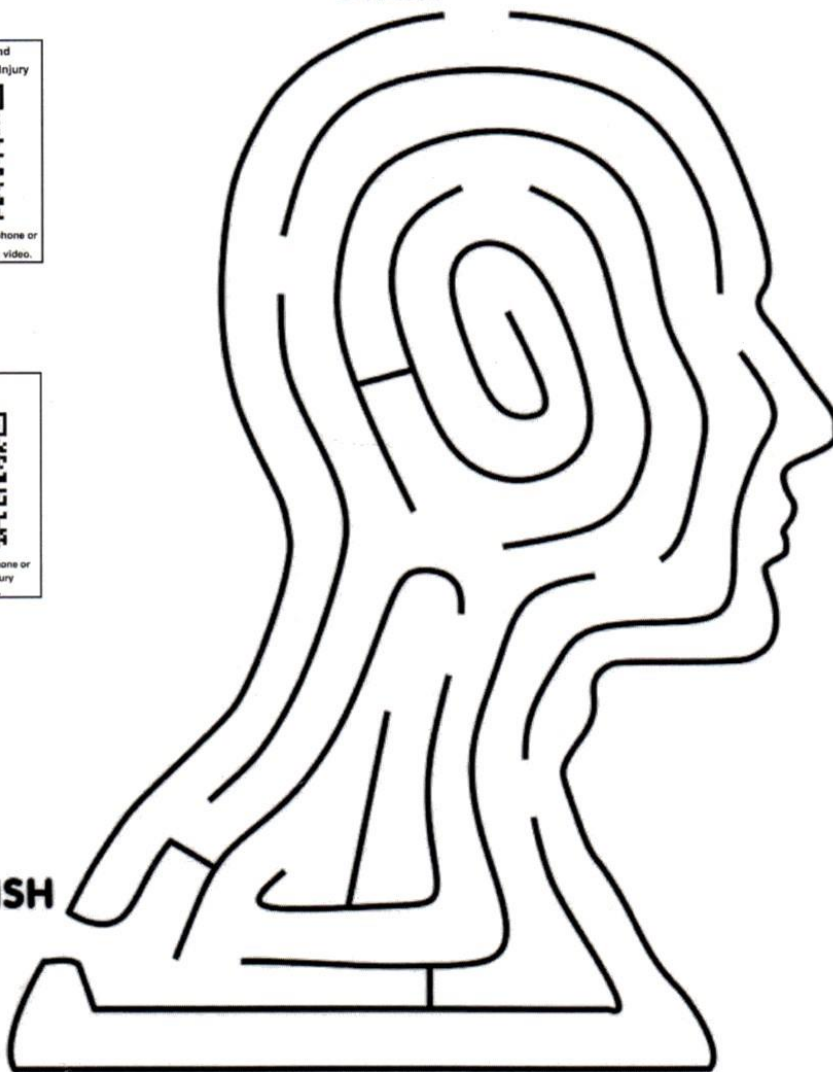
Different parts in the brain do **different** things. Some parts help you **learn** and **remember**, some help you to solve problems and make decisions. Some help you with **balance** or to move your **hands, arms** and **legs**. Your **brain** does all of these things for you and many more. It sounds easy, but it is **not**. Your brain is working very **hard** all the time. Your brain is **amazing!**

June is Brain Injury Awareness Month

START



FINISH



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Approximately 5.6 million Canadians live with a neurological condition and 5 million Canadians live with a mental illness today - that's 1 in 3 Canadians living with a brain condition.

Brain injuries are more common than most people realize.

"Concussions are Brain Injuries"

BLM 4

What is Acquired Brain Injury(ABI)?

Acquired brain injury occurs when there is damage to the brain by an injury or illness after birth. The brain becomes injured when bruising, bleeding, swelling, fever, lack of blood or oxygen, damage of cells and/or increased blood pressure occurs in the brain.

Causes of Acquired Brain Injury(ABI)

There are many different ways an ABI can occur. Some examples include a blow to the head, diseases, infection, violent shaking and substance abuse.

Effects of Acquired Brain Injury(ABI)

There are many effects after acquiring a brain injury. Some examples include fatigue, headaches, blurred vision, memory loss and poor attention and concentration. Other effects include dizziness, depression, appetite and mood changes, sleep and emotional disturbance. People with brain injuries have had problems with communicating and difficult with sensory perception.

#1 Food for Thought

1. When does your brain work best?

Your brain works best when you eat a well-balanced meal.

2. What happens when you don't eat healthy?

- you could become forgetful
- be overly emotional
- be tongue-tied
- become light-headed

3. What would a well-balanced meal consist of? (see Canada Food Guide)

See page 8 of book good and bad good

#2 Exercise

1. What is exercise good for?

Exercise is good for your body and your brain.

2. What three things are playground activities and sports for?

- keep your body healthy
- keep your brain strong
- keep your brain working at its best

Illustrate a picture of you doing a playground activity or sport that will help your brain.

#3 Sleepy Head

1. What happens if you miss one night's sleep?

Missing one night's sleep makes you crabby.

2. What happens when you have two sleepless nights?

Missing two sleepless nights you will have trouble concentrating.

3. What would cause you not to have a goodnight sleep?

Making Informed Decisions

#1 Food for Thought

Design and label a well-balanced meal that you would eat to help take care of your brain. (Refer to Canadian Food Guide)

#2 Exercise

List three playground or sport activities that you plan to do to help keep your brain strong and at its best.

1.

2.

3.

#3 Sleepy Head

Set two goals that will help you get a better night's sleep.

1.

2.

Brain Injury and Sports

It is important to take brain injury out of play when dealing with sports

1. Swimming and Boating

Near drowning reduces oxygen flow to the brain, which can result in permanent brain injury.

Always:

- wear a lifejacket on the water
- be supervised by an adult

Have fun and be safe.

2. Soccer

Soccer can be a high impact sport. Heading the ball involves risks, but injuries also occur when players hit each other or the ground. A soccer ball can travel 100 km/h. Repeated low impact hits like those from heading, increase the risk of long term brain injury.

To avoid injury in soccer:

- "no heading" should be the rule for younger players
- head the ball correctly, ask a coach or professional about proper technique
- make sure the ball is the right size for the players
- ensure goal posts are padded

Respect the unexpected.

3. Football

Many brain injuries occur in football each year. Some head injuries in football are very severe because they happen more than once. This can lead to memory issues and other brain issues that may occur when they are older.

Tips when playing football:

- proper equipment needs to be worn at all times, even during practice
- playing field should be examined for uneven spots
- neck strengthening exercises are important
- pad side posts for impact
- learn and use proper skills

Stay alert, don't get hurt.

4. Hockey

In Canada, those who play are at the highest risk of receiving a brain injury, compared to all other sports. Violence in hockey contributes to this.

Tips when taking a hit:

- raise your hands, arms or shoulders up to protect your head during the collision
- never put your head down for a hit
- always keep your head up when you hit the boards

When in doubt, sit it out.

5. Skiing and Snowboarding

Brain injuries in skiing and snowboarding occur when skiers' heads hit snow, they collide with other skiers or collide with fixed objects.

Tips:

- wear a helmet approved for winter sports that fits snugly, but is still comfortable
- wear appropriate equipment
- if you wear glasses, wear them on the slopes
- wear goggles or sunglasses that block out sun rays and reduce glare
- know the rules of the hill and basic techniques on how to stop, turn, fall and get up
- watch for obstacles, jumps, barriers, trees and other skiers

Safety is a choice you make.

Helmet Basics

- ★ Different activities require different helmets.
- ★ Helmets should be worn for all wheeled activities such as skating, biking and inline skating.
- ★ Helmets with face protection should be worn for contact sports like football and hockey.

Buying a used helmet is NOT recommended.

- ★ Even though a used helmet may not have signs of damage, it may have absorbed all that it can.

Helmet Fitting

★the helmet should fit snugly

★it should be worn level on the head

★the chinstrap should form a "V"
directly under the earlobe

★the straps should be tight enough to
allow one finger between the straps
and the chin

Use the Eyes, Ears & Mouth Helmet Fit Test:

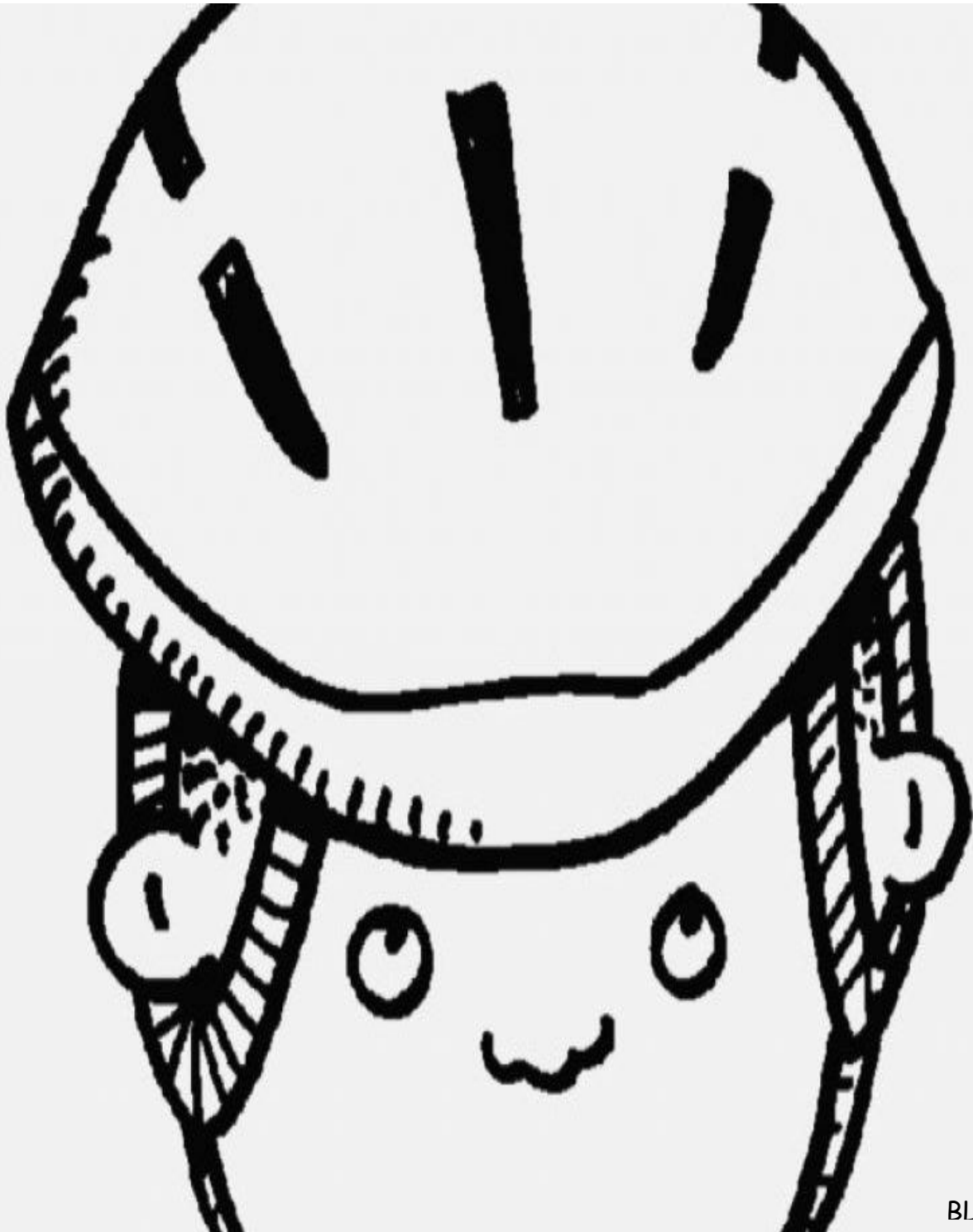
Eyes: Look up with the helmet on, you should be able to see the bottom of the rim of the helmet. The rim should be one or two finger widths above the eyebrows.

Ears: When buckles, straps should form a "V" under the ears.

Mouth: Open your mouth as wide as possible. The chinstrap should feel snug against the chin, with the helmet secure on the head. Tighten if necessary to ensure the buckle stays flat against the skin.

BLM 20

Design a helmet using a variety of lines, shapes and colours.



BLM 21

Anything With Wheels Safety

Brainstorm a list of things that you can ride on that have wheels:

Do you think you should wear a helmet when you ride on these (discuss).

A helmet is important for all sports that involve wheels, potential collisions or falls.

Pick one of the items that you brainstormed on the previous page and illustrate a picture of you riding on it wearing a helmet.

Concussion

A CONCUSSION IS A BRAIN INJURY

A serious hit to the head can hurt your brain and temporarily change the way your brain thinks. When this happens, the brain injury is called a concussion. The brain is slammed against the inside of its protected skull.

How can a concussion happen? (Discuss)

What are the Signs and Symptoms of a Concussion?

The signs of a concussion are generally the same for any age. Symptoms can last days, weeks or in some cases longer. Signs of a concussion can be:

- confusion
- vomiting
- dizziness
- slurred speech
- headache
- poor attention
- lack of coordination and balance
- loss of consciousness
- sensitivity to sound and/or light
- ringing in the ears
- tiredness
- change in sleeping patterns

BLM 24

Recognizing Concussions in Sports

Players who have suffered a concussion may minimize or deny symptoms in order to stay in the game. Having knowledge of that player's personality and an understanding of the signs and symptoms of concussion can prevent further injury or long term damage.

- confused look
- behavior is not typical for that person
- they have confusion of where they are as well as the time and date
- no memory of events for a period of time after the injury
- distracted and emotional

Tips for Recovery

- **rest**
- **no physical or contact activity**
- **avoid unnecessary movement of your head**
- **reduce screen time**
- **stay hydrated**
- **be patient**

To make things even more confusing, sometimes concussion symptoms don't show up right away after an injury. The signs and symptoms may appear hours or even days after the injury.

Discussion

What decision would you make if you were playing with someone and an injury occurred that you thought could result in a concussion? (Think of the various seniores you could come across)

Activity

Drama: Get into small groups and each group can act out one of the various scenarios discussed. Make sure to use language purposefully when speaking by using such words such as, brain injury, concussion, helmet, safety, risk, etc.

Action Plan to Prevent Brain Injury

What am I doing good now that prevents my brain from getting an injury?

What can I do differently?

Prompt: Why Helmets are Important

Sentence Starter

In my opinion, I think, I believe...

Reason	Example (supporting fact or detail)

Conclusion (End Strong!)

Viewing Activity- Teacher Copy

Brain Injury Poster

Name: _____

Date: _____

Before: Ideas can be drawn or written in point form or sentences. Before showing the poster ask: what do you know about brain injuries?

I know... about brain injury because... (activating prior knowledge/making connections)	I wonder... (asking questions, setting purpose)	I think... (making prediction)
-any comment that is relevant to the unit	-any questions relevant to the unit	- Will someone be hurt on the poster? -Will there be people with to without helmets on the poster? -Will people be playing sports on the poster? -any other predictions relevant to the unit

During:

1.What do you see in the picture? (content) any comment that is relative to the poster

-people of different ages -some are wearing helmets, some are not -people are active doing things

2.Who is the message for?

-parents of children -children in sports -adults in sports -people who drive a car - people who are active -people who drive something with wheels

3.Why did they make this poster?

So people won't get hurt and cause a brain injury. (any comments relevant to the unit)

4.What did you learn about brain injury?

Any comment relevant to the unit

Elements:

1.Colour	2.Movement	3.Size
<p>What colours do you see in the poster? Blue, red, white Why do you think they chose these colours? Blue- blue means trustworthy, reliable, these people are being reliable by wearing helmets White-simple, the background is white because it is a simple, but important message to wear a helmet Red- exciting, energy, the girl is going into a red car and is excited about driving but still needs to stay focused and be careful</p>	<p>What movement do you see in the poster? Yes, boy skateboarding, boy playing hockey, girl driving, women stepping, man riding a bike</p>	<p>Are any of the people on the poster larger than other people? Yes, the mom and the baby are the largest. Why is it different? because they want to make a point that a brain injury can happen to anyone, even when you are a baby.</p>
4.Fonts	5.Shape/Line	
<p>Is there any writing on the poster? Yes Why do you think it is written this way? "Anytime" is in the largest font to stand out The numbers represent that it can happen at anytime during the day.</p>	<p>What lines do you see? Curve lines, straight lines on the clock hands, small dashes What Shapes do you see? Circles (steering wheel, bike wheel, skateboard wheel, soother, clock), squares (facebook and twitter), puzzle piece as part of SBIA logo, poster is a rectangle</p>	

After:

- 1.What text form is being used?
-poster
- 2.What did you like about this poster?