All assignments in this packet must be completed for full credit. This assignment will be a part of your quarter grade.

Due: ______________________
What is the most complicated "machine" in the world? It is the human brain! Your brain controls everything about you. It keeps your heart beating. It tells you how to move your body. It makes sure your body is the right temperature. It helps you see, feel, taste, hear, and smell. Your brain stores all of your memories. It is the place where all of your thoughts and ideas begin.

The brain is actually not very big. This is surprising since it does so much. But, this critical organ, or body part, only weighs about three pounds. It makes up less than two percent of your whole body. Without it, nothing in your body would work.

How does the brain do all of its work? It sends messages to every part of the body. To do this, it uses neurons, or nerve cells. Neurons use a linking method, called synapses, to send information from the brain to other parts of the body. Synapses are the tiny spaces between the neurons. There are over 100 billion neurons in your brain. They send commands across one quadrillion synapses. These commands are like electrical sparks, and they make every part of your body work!

Even when you are asleep, your brain is working. It makes you dream. It checks the temperature of your body. It tells your muscles if your body is too hot or too cold. Then, it sends messages that tell your body to move around in your bed. If you push your blanket away while you are asleep, it is because your brain told you to do it!

Different parts of the brain take care of different parts of the body. The upper part of your brain, shaped like a bike helmet, takes care of memory and feelings. It takes messages from all of your senses. The lower part of your brain takes care of your body movements. The brain stem, in the lower back of the brain, is in charge of things like your heart, blood movement, and hunger.

What happens if something hurts a person's brain?
Answer the following questions based on what you read on page 59. Then, finish reading the story on the next page.

1. Synapses are like—
   a. safety ropes.
   b. nerves.
   c. tiny gaps between wires.
   d. big holes in the road.

2. Why does the author say it is surprising that the brain only weighs three pounds?
   a. It is surprising because that’s very heavy.
   b. It is surprising because the brain does so much to be so small.
   c. It is surprising that the brain doesn’t weigh less.
   d. It is surprising that the brain needs so much room.

3. What is a neuron?
   a. a connection between one cell and another
   b. a nerve cell
   c. a linking system
   d. a memory cell

4. What does your brain control?
   a. the beating of your heart
   b. your body temperature
   c. the movement of your body
   d. all of the above

5.-9. Write T for true or F for false.
   5. ______ Your dreams are created by your brain.
   6. ______ The brain stem controls your thoughts and feelings.
   7. ______ The upper part of the brain is shaped like a ball.
   8. ______ Neurons are linked by synapses.
   9. ______ The lower part of your brain controls body movements.

10. What do you think the author will write about next? Write your answer in a complete sentence.

   ____________________________________________

   ____________________________________________

   ____________________________________________

It depends on which part gets hurt. Sometimes, an injury to the brain will stop a person from being able to move. Other times, it will make the person lose memory. It also might make it hard for the person to speak. It is important to take care of the brain. When a brain cell is hurt, it cannot be fixed again. And, without the cells of this fascinating machine, we could never invent any other fascinating machines!

So, how can you take care of your brain? There are simple things you can do to make sure that your brain stays healthy. Drugs and alcohol can kill brain cells, so staying away from drugs and alcohol is important. Always wear a helmet when you ride your bike to help keep your head—and your brain—safe.

Sleep is very important to your brain. That’s why you will sleep for one-third of your lifetime. By the time you are 80 years old, you will have spent more than 26 years of your life asleep! Scientists are not exactly sure why the brain needs sleep. But, they know that without sleep, the brain cannot work correctly.

In addition to sleep, your brain also gets energy from what you eat. Do you think “brain food” really exists? Scientists say that some foods are better for the brain than others. The fats found in fish and vegetable oils help renew your brain. Eggs may help you remember more. Dark green vegetables can make you think better and be in a better mood.

Are there other ways to take care of your brain? Here’s one amazing way: learn new things! The brain stays healthy when you learn. Playing word games, reading about science or history, or learning to play music are just a few ways that you can “feed” your brain with new ideas. Exercising and playing games also helps your brain focus. If you keep learning and moving throughout your life, your brain will be quicker and healthier.
The Most Fascinating Machine

Answer the questions below.

11. Read the following sentence from the story and answer the question.

The fats found in fish and vegetable oils help renew your brain.

What is a synonym for renew?
   a. reshape
   b. recapture
   c. recent
   d. refresh

12. What can happen when the brain is hurt?
   a. A person might have trouble talking.
   b. A person might lose her memory.
   c. A person might not be able to walk or move.
   d. all of the above

13. Which part of the brain is shaped like a bike helmet?
   a. the upper part of the brain
   b. the brain stem
   c. the lower part of the brain
   d. a neuron

14. Based on what the story says about keeping brains healthy, what can you infer might help your brain?
   a. doing a crossword puzzle
   b. watching an old show on TV
   c. chewing gum
   d. none of the above

15. The story talks about all of these things EXCEPT—
   a. how food can affect your brain.
   b. what happens when brain cells get hurt.
   c. how animal brains are different from human brains.
   d. how to feed your brain with new ideas.

16. According to the story, what is the reason that sleep is important for the brain?
   a. The story says that sleep helps to fix hurt brain cells.
   b. The story says that sleep is important to the brain because of dreams.
   c. The story says that we don’t know why sleep is important to the brain.
   d. all of the above

17. Explain how you plan to keep your brain healthy. Write your answer in complete sentences.

   ___________________________________________________________

   ___________________________________________________________

   ___________________________________________________________

   ___________________________________________________________

   ___________________________________________________________
BLIZZARD BAG

#2

All assignments in this packet must be completed for full credit. This assignment will be a part of your quarter grade.

Due: ___________________________
LUCKY INVENTIONS

Believe it or not, many things that make our lives easier came about by accident. Some other things came about because someone was trying to solve a problem.

Today many people enjoy cereal such as cornflakes. In the late 1800s two brothers named Kellogg waited an extra day before running their cooled wheat through rollers. They were surprised when the wheat became flakes instead of flat sheet. They tried this with corn and found that the same thing happened.

Cornflakes were a big hit with consumers. People bought them right away. When wheat flakes were sold 26 years later, consumers bought them for breakfast, too.

What did people do before the invention of self-stick notes? In 1974 Art Fry was a worker at a company called 3M. He also sang in his church choir. Before singing, Fry would put pieces of paper in choir book to help him find his place easily. Sometimes the papers would fall out.
Then Fry had an idea. Why not use a type of glue that had been invented by 3M several years before? The company hadn’t used this temporary, or short-lasting, glue. But the temporary glue might be just right to keep Fry’s papers in place.

It took about a year and a half to make the glue stick just right. Since then, many other uses have been found for this glue----for example, on notepads and labels.

One day George DeMestral was walking through the woods. Cockleburs, a part of the cocklebur plant, stuck to his clothing. DeMestral used a microscope to find out why this happened. He discovered that cockleburs are covered with tiny hooks. These hooks stick to clothing or fur.

DeMestral used what he found out to create Velcro. Velcro is made in two parts. One part has hooks, like the cockleburs, and the other has loops, like clothing.

Today Velcro has many uses around the world. It is used on everything from jackets to jets.

Imagine what our lives would be like without these and other inventions.
1. The following sentence is from the selection.
   Cornflakes were a big hit with **consumers**.
   What choice means the same as **consumers**?
   O A. They invent products.
   O B. They buy products.
   O C. They sell products.
   O D. They make products.

2. Cornflakes were discovered by two brothers named Kellogg when
   O A. They ran their cooked wheat through rollers.
   O B. The brothers ran their cooked corn through rollers.
   O C. They waited a day and ran their wheat through the rollers and it became flakes.
   O D. They waited a day and ran their corn and found that the same thing happened.
3. Explain why Art Fry invented self-stick notes.

4. What new way did Art Fry keep his papers in place?
   O A. by using notes with permanent glue
   O B. by using notes with tape
   O C. by using notes on notepads
   O D. by using notes on temporary glue

5. Why do cockleburs stick to peoples’ clothing?
   O A. They have glue on them.
   O B. They are covered with loops.
   O C. They are covered with tiny hooks.
   O D. They are like little magnets.
6. DeMestral created
   O A. cockleburs
   O B. Velcro
   O C. glue sticks
   O D. clothing

7. Velcro is made of two parts. One part has hooks, the cockleburs, and the other has
   O A. ribbons
   O B. buckles
   O C. loops
   O D. lace

8. The article gives you enough information to conclude
   O A. Inventions always come about by accident.
   O B. Inventions can change our lives.
   O C. Inventions are always planned.
   O D. Inventions happen every day.
9. Which of these is a fact presented in the article?
O A. Inventors are more curious than other people.
O B. Cornflakes are the most popular cereal.
O C. Velcro has many uses around the world.
O D. People would rather use Velcro than zippers on their clothing.

10. Which of these is the best summary for this article?
O A. Some inventions came about by accident.
O B. Inventions always make our lives better.
O C. Inventors are very smart people.
O D. Invention are always well planned.
11. Fill in this graphic organizer with the inventions found by accident.
12. Using this selection. Fill in the missing information.

<table>
<thead>
<tr>
<th>INVENTORS</th>
<th>INVENTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>KELLOGGS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SELF-STICK NOTES</td>
</tr>
<tr>
<td>DEMESTRAL</td>
<td></td>
</tr>
</tbody>
</table>
All assignments in this packet must be completed for full credit. This assignment will be a part of your quarter grade.
Walt Disney

Walter Elias Disney was born in Chicago, Illinois, in 1901. As a child, Walt always enjoyed drawing. When he was 16, he went to Chicago. He decided that he wanted to study art. At the age of 19, he got a job making cartoon ads for movie theaters.

In 1923, he moved to Los Angeles, California. He was interested in the movies. Walt could not afford his own studio. Instead, he drew cartoons in his garage. He liked to make his characters do funny things.

When Walt was 27, he created Mickey Mouse. This charming little mouse would become his most famous character. Within ten years, Walt created Donald Duck, Goofy, and other characters that we know so well.

At first, Disney's cartoons were very short movies. Disney decided to make a full-length animated film. He began work on Snow White and the Seven Dwarfs. Thousands of drawings would be needed. Disney hired a team of people to help him.

Would people watch a long cartoon? The movie was a big hit. Disney then made other classics like Pinocchio, Bambi, Cinderella, and The Jungle Book. Next, Disney wanted to try a new idea. He decided to combine live actors with cartoons. Soon, people could see Mary Poppins in the theater.

Walt Disney had one last idea. He wanted to create an enormous amusement park. In this park, families could enjoy themselves. He named the park after himself: Disneyland. He was pleased people could go to a place and be kids all over again.

Walter Elias Disney died in 1966. The dreams of Mr. Disney gave us a cast of characters that children, and adults, continue to enjoy.
1. Which definition of hit is used in the sentence below?

<table>
<thead>
<tr>
<th>hit</th>
<th>v 1. to give a blow to; strike</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>v 2. to come against</td>
</tr>
<tr>
<td></td>
<td>n 3. a person or thing that is successful or popular</td>
</tr>
</tbody>
</table>

The movie was a big hit.

O A. definition 1  
O B. definition 2  
O C. definition 3

2. This sentence is from the reading selection.

This charming little mouse would become his most famous character.

The author used the word charming to tell the reader that the mouse was

O A. delightful  
O B. unhappy  
O C. boring
3. Use information from the reading selection to complete the chart.

**Problem** – the part of the story where the character has to figure out what to do.

**Solution** – the answer to the problem.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Walt Disney drew cartoons in his garage.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Walt Disney loved drawing and wanted to study</td>
<td></td>
</tr>
<tr>
<td>art.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>He moved to Los Angeles, California.</td>
</tr>
</tbody>
</table>
4. What was Disney’s most famous character?

O A. Mickey Mouse
O B. Goofy
O C. Donald Duck

5. Why did Disney hire people to help him make a full-length animated film?

O A. It would take many people to help him create all the drawings that were needed.
O B. Disney knew many people that were good at drawing and they needed a job.
O C. A lot of people wanted to work for Disney because they loved his cartoons.

6. This sentence is from the selection.

He decided to **combine** live actors with cartoons.

Which is a synonym for **combine**?

O A. join
O B. jolly
O C. joyful
7. Disney's Mary Poppins was different from his other cartoons because

O A. it had only cartoon characters.
O B. it had only live actors.
O C. it was a cartoon with live actors.

8. Use the reading selection to complete the web.
9. This paragraph is from the selection.

Walt Disney had one last idea. He wanted to create an enormous amusement park. In this park, families could enjoy themselves. He named the park after himself: Disneyland. He was pleased people could go to a place and be kids all over again.

Which question does this paragraph answer?

O A. What kinds of rides are at the amusement park?
O B. Is Disneyland a large park?
O C. How many families visit the park each day?

10. How do you think Walt Disney felt before Snow White and the Seven Dwarfs was shown in the theater to people?

Why do you think he felt that way?
11. Why was Walt Disney pleased when Disneyland was completed?

O A. He wanted to begin work on a character named Mickey Mouse.
O B. He had created a park only children could attend.
O C. He was happy people could go to a park and enjoy acting like they were young again.