

# Functions of the brain

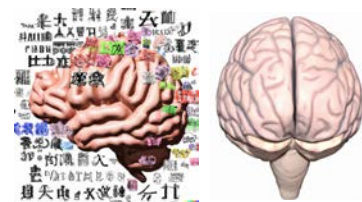
Match the functions of the brain to the pictures.  
Fill in the blanks.



1. The brain \_\_\_\_\_  
For example: \_\_\_\_\_



2. The brain monitors the \_\_\_\_\_  
by regulating the release of \_\_\_\_\_



3. The \_\_\_\_\_  
of the brain is responsible for  
the learning of languages.



4. \_\_\_\_\_ are encoded  
in neural pathways.

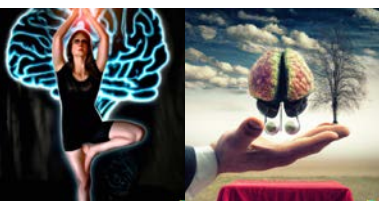
5. The brain is the \_\_\_\_\_  
and \_\_\_\_\_  
to the rest of the body.



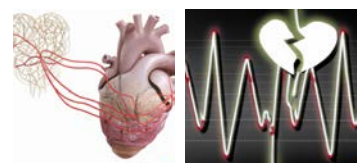
6. The brain controls \_\_\_\_\_  
by reading changes in the levels  
of \_\_\_\_\_  
in the blood.



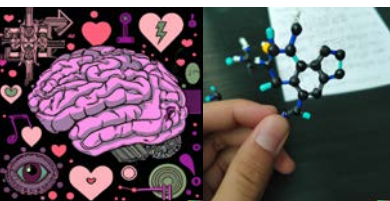
7. The \_\_\_\_\_ is responsible  
for \_\_\_\_\_.



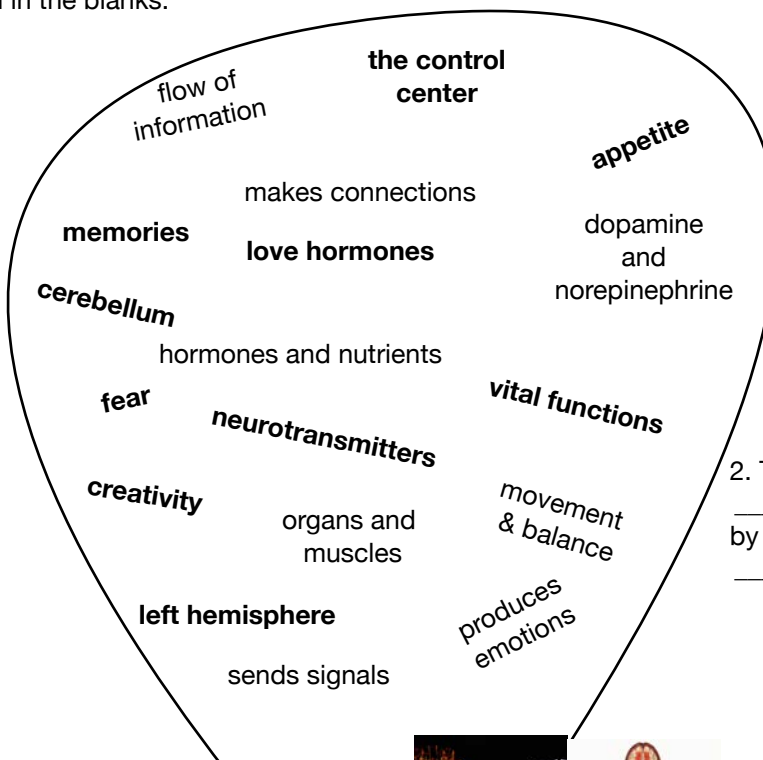
8. The brain is responsible for  
the \_\_\_\_\_ and  
sends signals to all of the \_\_\_\_\_.



9. The brain produces \_\_\_\_\_  
For example: \_\_\_\_\_



10. \_\_\_\_\_ is linked to  
the brain's ability to \_\_\_\_\_  
between ideas.



## Answer the questions below.

1. What do you do when you want your brain to work better? \_\_\_\_\_
2. Give an example of something you like to do, but you think is not good for your brain. Explain. \_\_\_\_\_
3. How can you protect your brain? \_\_\_\_\_
4. Which function of your brain do you think is strong? Why? \_\_\_\_\_
5. Which function of your brain do you think is weak? Why? \_\_\_\_\_

## Functions of the brain

1. The brain **produces emotions**.

For example: **fear**

2. The brain monitors the **flow of information** by regulating the release of **neurotransmitters**.

3. The **left hemisphere** of the brain is responsible for the learning of languages.

4. **Memories** are encoded in neural pathways.

5. The brain is the **control center** and **sends signals** to the rest of the body.

6. The brain controls **appetite** by reading changes in the levels of **hormones and nutrients** in the blood.

7. The **cerebellum** is responsible for **balance and movement**.

8. The brain is responsible for the **vital organs** and sends signals to all of the organs and muscles.

9. The brain produces **love hormones**.

For example: **dopamine and norepinephrine**.

10. **Creativity** is linked to the brain's ability to **make connections** between ideas.

1. I try to get a good night's sleep, eat healthy foods, and exercise regularly.

2. I like to play video games, but I think they are not good for my brain because they can be addicting and I can become too focused on them.

3. I can protect my brain by wearing a helmet when I ride my bike, and by not doing things that are risky or dangerous.

4. I think my memory is strong because I can remember things from a long time ago.

5. I think my math skills are weak because I have trouble with numbers and I don't like doing math.

1.

Violet, can you tell me, how the brain produces emotions?

Sure! The brain produces emotions, in response to different stimuli. For example, if you see something that scares you, your brain will produce the emotion of fear.

2.

Theodore, I have so much information coming into my brain. Does the brain really monitor all of this information? It seems complicated!

I think so too! All I know is, that the brain monitors the flow of information, by regulating, the release of neurotransmitters.

3.

Amber, I think my language learning skills are not good. So, I'd like to know, which part of the brain, is responsible for the learning of languages?

I'm not sure Caleb, but I think it's the left hemisphere.

4.

I'm trying to work out how the brain stores our memories. Lily, what do you know about this?

Not much! But from what I understand, the brain stores memories, in a way that's similar to how a computer stores data. There are different areas of the brain, that are responsible for different types of memories, and the memories are encoded in neural pathways.

5.

Dr Tony! Sometimes, I just can't control my body. So does that mean, there's something wrong with my brain?

Hmmm.. maybe! I'd need to do some tests. But the brain is the control center of the body, because it's responsible for sending signals, to the rest of the body. These signals tell the body, what to do, and how to respond, to different stimuli.

6.

I'm so hungry, I could eat a horse. Hey Sara, does the brain control my appetite?

Yes Christopher, the brain controls your appetite. It reads changes in the levels of hormones and nutrients in the blood.

7.

Hollie, I've got a headache! Is yoga good for the brain?

Yes Emily, for sure, it helps improve cognitive function, and can even help prevent Alzheimer's disease.

Wow, that's cool! So, which part of the brain, is responsible for balance and movement?

The cerebellum, is responsible for balance and movement.

8.

Dr Olivia, my heartbeat, sometimes goes fast, and sometimes slow, for no reason. I want to know, how the brain is connected to our vital functions.

Logan, the brain is the control center, for all of our vital functions. It sends signals, to our organs and muscles, to tell them what to do.

9.

Abeo, people always say, that when they are in love, there is an increase in hormones. So what's happening?

Imani, it means, that when you're in love, your body produces, more of the hormones, dopamine and norepinephrine, which makes you feel, happy and excited.

10.

Vincent, you're a creative person. What's the connection, between the brain and creativity?

Frida, there's a lot of debate, on this topic, but some scientists, believe that creativity, is linked to the brain's ability, to make new connections between ideas.