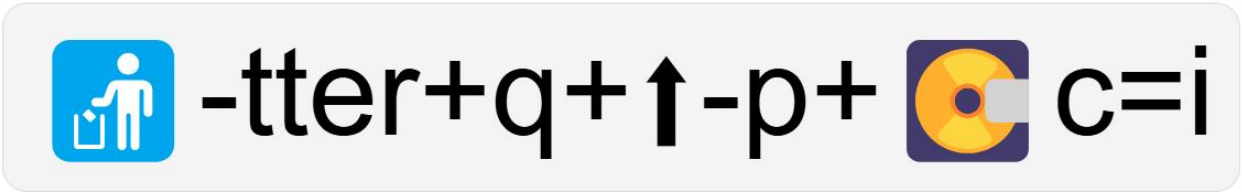
THE BRAIN AND FUNCTIONS OF ITS HEMISPHERES.

9.1. Vocabulary

Ex. 1. *Solve the rebus puzzle. Translate the words.*

1.

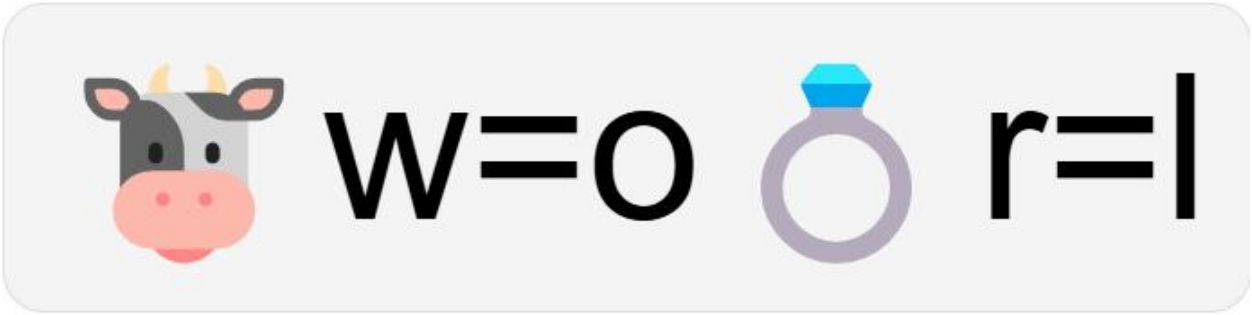


2.

3.

4.

5.



Ex. 2. *Complete the sentences with the given words.*

Change, condition, prey, liquid, lap up, influence, speech, exist, grasp, development, develop, sticky, evolve, gradual, considerable, event, complex, cooling

Scientists believe that different functions of the brain _____(1) in separate hemispheres.

The _____(2) of our understanding of brain structure is ongoing and important.

There is _____(3) research dedicated to how each hemisphere processes information differently.

The _____(4) of a person's brain can greatly affect their cognitive abilities.

The brain contains a special _____(5) that protects and nourishes its cells.

Having a good _____(6) of how brain functions differ can help in learning.

Emotions can _____(7) how we think and behave based on which hemisphere is active.

The brain's communication system is _____(8), involving many regions working together.

As humans age, their brains continue to _____(9) and adapt to new experiences.

Babies often _____(10) sounds around them to learn the patterns of language.

A significant _____(11) in neuroscience was discovering how the brain repairs itself.

Learning a new language can be a _____(12) process for many learners.

The _____(13) of the brain can happen when we experience stress or fatigue.

Some animals use their quick reflexes to catch _____(14) more effectively than others.

We need to _____(15) better ways to study brain functions through modern technology.

After eating candy, my fingers became _____(16), making it hard to write.

Giving a _____(17) about the brain requires clear examples for better understanding.

_____(18) in brain chemistry can lead to differences in mood and behavior.

9.2. Grammar

Ex. 1. *Translate the sentences into Russian.*

1. Today the botanists have described about 400,000 species.

2. Science has now identified every gene in humans.

3. Not many people have seen icebergs.

4. No one has ever invented a perpetual motion machine.

5. Humans have eaten vegetables, fruit, fish, and meat since the Stone Age.

6. For five thousand years people have communicated in writing.

7. Many modem birds have lost the ability to fly, e.g. emus, penguins, and ostriches.

8. Mammals have inherited from lower vertebrates a capacity to repair injury and

replace some parts of the skeleton.

9. Solar energy in its various forms has played a significant role in the progress of humanity.

10. Drugs have extended our lives and improved quality of life in countless ways.

11. Over the past century the concentration of carbon dioxide in the atmosphere has risen.

12. Wood has been one of the most important materials on Earth for millions of years.

13. There have been thousands of studies on the effects of herbs.

14. Every living thing—a dolphin, an ant, a daisy, or a human body—has begun

life as a single cell.

9.3. Reading

Ex. 1. *Read the text.*

The brain, an organ that allows humans to exist, is divided into two hemispheres, each with distinct functions. The development of the brain is a gradual process, evolving over millions of years. Each hemisphere has a considerable influence on different capabilities. For instance, the left hemisphere is mainly responsible for speech and language, while the right hemisphere enhances complex problem-solving skills.

Conditions affecting the brain, like cooling impairments or imbalances in liquid levels, can hinder its performance. Understanding how the hemispheres interact provides a deeper grasp of human behavior. Neuroplasticity shows how the brain can develop new pathways, adapting to change and event-driven demands.

Occasionally, the brain's response to stimuli can appear almost sticky, holding onto information and experiences. For example, reactions to traumatic events can lap up the brain’s resources. On the other hand, positive stimuli can promote the brain’s capacity to learn and evolve.

In predatory species, brain adaptations assist in tracking prey. Over time, humans have harnessed these abilities, achieving considerable advancements in technology and culture. Understanding the unique roles of each hemisphere helps in deciphering the complex nature of human cognition.

Ex. 2. *Answer the questions.*

1. How is the brain divided in terms of function?

2. What influences the development of the brain over time?

3. What are some conditions that can affect the brain's performance?

4. How does neuroplasticity play a role in the brain's ability to adapt?

5. Can traumatic events impact the brain's response to stimuli? If so, how?

6. How have predatory species utilized brain adaptations for survival?

7. How has understanding the unique roles of each hemisphere contributed to advancements in technology and culture?

9.4. Communication

Ex. 1. *Make sentences using the following words.*

1. hemisphere/controls/language
2. right/responsible/creativity
3. hemispheres/work/process
4. hemisphere/unique/functions
5. brain/divided/hemispheres
6. left/dominant/people
7. right/spatial/awareness
8. hemispheres/communicate/corpus
9. damage/affect/abilities
10. understanding/works/fascinating