***Dear AYGUN SCHOOL students I wish you happiness and success forever,***

***Lesson 1.***

**Why thinking too much makes you tired**

Have you ever wondered why thinking too much makes you tired? A new study has found out some answers to this question. Researchers from the Paris Brain Institute looked at why mental effort makes us tired. They found that when people think a lot, the brain releases a chemical called glutamate. Too much glutamate upsets the brain's functions. It means the brain tells the body it is tired and that it must rest. People who spend more than six hours working on a task that requires a lot of thought are more likely to feel tired. A period of rest allows the brain to return to normal. This explains why a power nap is good for us. A power nap can be as short as 20 minutes but can make us feel totally refreshed.

The research team looked at the behavior of 40 participants in their research. Twenty-four of these had to perform challenging tasks. These included looking at a computer screen and matching different letters that appeared. The other 16 participants did a similar, but easier task. Both teams worked for six hours and had two ten-minute breaks. The researchers scanned the brains of the participants. They found that the group who had the more difficult task had higher levels of glutamate in their brain. Study author Antonius Wiehler said: "It would be great to find out more about how glutamate levels are restored." He asked: "Is sleep helpful? How long do breaks need to be to have a positive effect?"

***1.Choose the best explanations ( an open test)***

1. wondered
2. study
3. effort
4. chemical
5. function
6. task
7. nap
8. Activities that are natural to or the purpose of a person or thing.
9. A short sleep during the day.
10. Wanted to know more about something.
11. A piece of research.
12. A thing from nature that other things are made from (O2, H2O, Fe....)
13. A piece of work that we need to do
14. Hard physical or mental work.

***2.Choose the best explanations ( an open test)***

1. behavior
2. perform
3. appeared
4. scanned
5. author
6. restored
7. break \
8. Returned something to as it was before
9. The writer of something
10. Made a surface or part of the body to be looked at by an electromagnetic beam
11. The way people act towards other people.
12. A short rest from work or from doing something.
13. Do an action, job or function.
14. Came into view so we could see it/them.

**3. *TRUE / FALSE: Read the headline. Guess if 1-8 below are true (T) or false (F).***

1. The Paris Brain Institute looked into why thinking makes us tired.

**T / F**

1. The chemical glutamate tells the body that it is tired and needs rest. **T / F**
2. The article says we should go to bed after working for six hours.

**T / F**

1. We need to have a nap for longer than 20 minutes to feel refreshed. **T / F**
2. In the research, 16 participants worked for 24 hours.

**T / F**

1. In the tests, 24 people had to look at a computer screen.

**T / F**

1. People who did more difficult tasks had higher levels of glutamate. **T / F**
2. The author of the study wants to know if sleep is helpful.

**T / F**

***4.SYNONYM MATCH: Match the following synonyms from the article.***

1. wondered
2. found out
3. task
4. requires
5. period
6. perform
7. breaks
8. difficult
9. author
10. effect
11. **rests**
12. **needs**
13. **carry out**
14. **discovered**
15. **writer**
16. **time**
17. **piece of work**
18. **result**
19. **hard**
20. **thought about**