Sleep Article Questions

1.Place an X next to the vocabulary words that were new to you:

comprise

consolidating

dendrites

dispense

hypothesized

immunity

injected

intriguing

irrelevant

muddled

neural

neurons

physiological

pruning

reactions

recharge

rodents

significant

stimulated

synapse

1. Why do researchers think that sleeping serves a purpose?
2. What are some of the theories about why we sleep?
3. How do the brain’s cells communicate with each other? Draw a diagram to help explain your answer. If you need to, you may get a green Life Science textbook and look up nerve cells.
4. What di Giulio Tononi and Chiara Cirelli hypothesize?
5. If mice do not have enough sleep, what happens to the number of synapses in their brains?
6. Proteins are molecules that have many jobs in living organisms, such as controlling chemical reactions and building molecules. What job does the protein called ‘Homer1a’ have in the brains of mice?
7. What happened to the mice in which the activity of ‘Homer1a’ was blocked?
8. Examine the “Time Schedule for Complex Learning” figure in the article, and write a summary of the information:
9. Why would it not be good to wait to study for a science test until the night before the test?

Write four notes from the Sleep Video:

How does Homer1a decide which synapses to remove?