II Communication in the Nervous System

* Neuron- Define
* Glia- Define
* Neurons are often called?
* Estimated amount in humans?
1. The Structure of the Neuron
* 3 main parts?
* Dendrites- Define
* Cell Body- Define
* Axon- Define
	+ Axon Terminals- Define
* Neurons 2 jobs?
* Myelin Sheath- Define
* Draw **Figure 4.5** (on a separate piece of paper)
1. Neurons in the News
* Regeneration- Explain
* Do mammals produce new CNS cells- Explain
* Stem Cells- Define
	+ What can promote the production of new cells?
	+ What can hurt?
	+ Debate on Stem Cell Research?
		- Beside embryos where do you get stem cells?
1. How Neurons Communicate
* Draw **Figure 4.7** (on a separate piece of paper)
* Synaptic Cleft- Define
* Synapse- Define
	+ When do they form?
	+ What should parent so to help?
	+ How long does forming and pruning last?
	+ Plasticity- Define
* Action Potential-Define
	+ Explain unmyelinated?
* Synaptic Vessels- Define
	+ Explain
* Neurotransmitter- Define
* Receptor Sites- Define
	+ Effects
		- Excitatory- Define and Explain
		- Inhibitory- Define and Explain
1. Chemical Messengers in the Nervous System
2. Neurotransmitters: Versatile Couriers
	* Where do they exist?
	* What can they affect?
	* More well-known neurotransmitters:
3. Serotonin- Explain
4. Dopamine- Explain
5. Acetylcholine- Explain
6. Norepinephrine- Explain
7. GABA- Explain
8. Glutamate- Explain
	* Name the three things that can occur?
	* What do they warn you about? Why?
9. Endorphins: The Brains Natural Opiates
	* Endorphins- Define
	* What roles do they play?
	* Who discovered them?
	* When do endorphins “shoot up?”
	* What does this give animals? Give examples
10. Hormones: Long-Distance Messengers
	* Hormones- Define
	* Endocrine Glands- Define
	* How do they work?
	* Examples of hormones:
11. Melatonin- Explain
12. Adrenal Hormones- Explain
	* + Cortisol- Explain
		+ Epinephrine- Explain
		+ Norepinephrine- Explain
		+ How can it improve memory? Give example
13. Sex Hormones- Explain
	* + Androgens- Explain
		+ Estrogens- Explain
		+ Progesterone- Explain