Name_____Date_____ Section ___ Text / Chapter_____

K-W-L & The More You Know

ThinkSheet for Activating Prior Knowledge & Building Schema

Adapted from Ogle (1986)

BEFORE	BEFORE	AFTER
K What I **K**NOW	**W-N** What I **W**ANT/**N**EED to know (These become your purposes for reading.)	**L** What I **L**EARNED
1. Do a preview. 2. List here everything you know or think you already know about this topic.	3. List here what you want to know or need to know about this topic.	5. List here what you learned that you did not know before, the answers to what you want/need to know.
	W-M I **W**ANT to know **M**ORE than the text provides. Search beyond the text.	
	DURING Reading 4. While reading, list here what you realize you want/need to know that the text does not provide.	AFTER Reading 6. Now that you have finished the text, list here what else you want/need to understand that the text does not provide.

Record ***KWL & The More You Know*** on your Reading Log: the BEFORE line (K & W-N), the DURING line (W-M), and the AFTER line (W-M & L).
Reflect in the right-hand column about how this strategy helped you construct meaning.

Name_____ Date_____ Section ___ Text / Chapter Neuro Sci, Ch. 3 "Neuronal Membrane at Rest"

K-W-L & The More You Know

ThinkSheet for Activating Prior Knowledge & Building Schema

Adapted from Ogle (1986)

BEFORE	BEFORE	AFTER
K What I **KNOW** based on my preview + prior Knowledge	**W-N** What I **WANT/NEED** to know (These become your purposes for reading.)	**L** What I **LEARNED**
1. Do a preview. 2. List here everything you know or think you already know about this topic. Glia – 10 times as many as neurons Protein – important for good heath My 8th grade science fair project was on osmosis so I understand diffusion and permeability of membranes Electrons + electricity – as per daily use + Thomas Edison Potassium. I've heard of it. Is it a salt? Axon I know messages move up and down the axon (I have much to learn!)	3. List here what you want to know or need to know about this topic. → what is their function? → why important? What are proteins, chemically speaking? → Why is osmosis not mentioned anywhere in a chpt on membranes? → How do diffusion + permeability work in the neuron cell? → How do electrons work in the chemistry and physics of the neuron cell? → Does it pull things across the membrane? What does it do? Is it as important as protein? → What makes this work? Are chemical reactions happening? • Why "neuronal membrane at rest"? • What are the parts of this membrane? • What does the membrane do? Why is it important?	5. List here what you learned that you did not know before, the answers to what you want/need to know. ion – an atom or molecule that has lost or gained one or more electrons + so has acquired a positive charge (cation) or a negative charge. Ions make possible the chemical reactions needed for transmitting messages – the push for equilibrium. → Electrical signals flow down the axon because of chemical reactions across membranes by way of protein channels. → These regulate diffusion a bi-layer forms a barrier to water ions Heads face outward (ions + polarized molecules) Tails face inward (water insoluble) Lots of my questions were not answered (maybe in later chapters)
	W-M I **WANT** to know **MORE** than the text provides. Search beyond the text.	
	DURING Reading 4. While reading, list here what you realize you want/need to know that the text does not provide. ion I can tell the authors assume I know what this is and why ions are essential. I went to an online dictionary – No help went to an online encyclopedia – helped	**AFTER Reading** 6. Now that you have finished the text, list here what else you want/need to understand that the text does not provide. • How are protein channels highly selective? • Why are protein channels so important for electrical current to flow across the membrane?

Record ***KWL & The More You Know*** on your Reading Log: the BEFORE line (K & W-N), the DURING line (W-M), and the AFTER line (W-M & L).

Reflect in the right-hand column about how this strategy helped you construct meaning.