Class Preparation: Mental Health #1

Directions: Fill in the charts below. Identify what mental health disorders can occur when each neurotransmitter is increased or decreased.

	Functions	Increase	Decrease
Dopamine	Fine muscle movements, integration of emotions and thoughts, decision making, stimulates hypothalamus to release hormones	schizophrenia mania	parkinsons depression
Norepinephrine	mood, attention and arousal, fight or flight in response to stress	anxiety mania schizophrenia	depression
Serotonin	mood, sleep regulation, hunger, pain perception, aggression and libido	anxiety	depression
GABA	reduces anxiety, aggression, pain perception, anticonvulsant and muscle-relaxing properties	reduction of anxiety	anxiety disorders, schizophrenia, mania
Acetylcholine	plays a role in learning and memory, regulates mood, mania, sexual aggression, stimulates the parasympathetic nervous system	depression	Alzheimers disease, Dementia, Parkinsons, Huntingtons chorea

Structures of the Brain

Brain Structure	Function
The limbic System	TO process and regulate emotion and memory while also dealing with sexual stimulation and learning. Behavior, motivation, long-term memory, and our sense of smell also relate to the limbic system
Frontal Lobe	important voluntary movement, expressive language and for managing higher level executive functions referring to a collection of cognative skills including the capacity to plan, organize, initiate, self-monitor and control one's responses in order to achieve a goal.
Parietal Lobe	vital for sensory perception and integration, including the management of taste, hearing, sight, touch, and smell. Home to the brains primary somatic sensory cortex, a region where the brain interprets input from other areas of the body.
Temporal Lobe	interperting sounds from the ears and plays a significant role in recognizing and using language. Also helps with object recognition and interacts with other structures to create new and long term memories.
Occipital Lobe	visuospatial processing, distance and depth perception, color determination, object and face recognition, and memory formation