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 movement - integration of emotions and thoughts - decision making - stimulates hypothalamus to release hormones	Schizophrenia, Mania	Parkinson Disease, 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 - libido	Anxiety	Depression
GABA	- reduces anxiety - aggression - pain perception - anticonvulsant - muscle- relaxing properties	Reduction of anxiety	Psychosis
Acetylcholine	- learning and memory - regulates mood - mania - sexual aggression - stimulates the parasympathetic nervous system	Depression	Alzheimer disease, Dementia, Parkinson disease, Huntington's Chorea

Structures of the Brain

Brain Structure	Function
The limbic System	Processes and regulate emotion and memory while dealing with sexual stimulation and learning 3 main functions: emotions, memories, and arousal
Frontal Lobe	It involves voluntary movement, expressive language and managing higher level executive functions (plan, organize)

Parietal Lobe	Sensory perception (hearing, taste, smell, sight, and touch)
Temporal Lobe	Processes auditory information and with encoding of memory. Processes affect/emotions, language, certain aspects of visual perception
Occipital Lobe	Visuospatial processing, distance and depth perception, color determination, object recognition, and memory formation