

### 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.

	<b>Functions</b>	<b>Increase</b>	<b>Decrease</b>
<b>Dopamine</b>	- Fine muscle movement, integration of emotions and thoughts, decision making, stimulates hypothalamus to release hormones	Schizophrenia, Mania	Parkinson Disease, Depression
<b>Norepinephrine</b>	Mood, attention and arousal, fight or flight in response to stress	Anxiety, Mania, Schizophrenia	Depression
<b>Serotonin</b>	Mood, sleep regulation, hunger, pain perception, aggression, and libido	Anxiety	Depression
<b>GABA</b>	reduces anxiety, aggression, pain perception, anticonvulsant, and muscle-relaxing properties	Reduction of anxiety	Anxiety disorders, schizophrenia, mania
<b>Acetylcholine</b>	Plays a role in 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

<b>Brain Structure</b>	<b>Function</b>
The limbic System	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 and its sphere of influence.
Frontal Lobe	voluntary movement, expressive language and for managing higher level executive functions.
Parietal Lobe	sensory perception and integration, including the management of taste, hearing, sight, touch, and smell. It is home to the brain's primary somatic sensory cortex
Temporal Lobe	interpreting sounds from the ears and plays a significant role in recognizing and using language.

Occipital Lobe	visuospatial processing, distance and depth perception, color determination, object and face recognition, and memory formation.
----------------	---