<table>
<tr><td>Topic/Title</td><td>Neuroanatomy Bingo</td></tr>
<tr><td>Level</td><td>High school teachers</td></tr>
<tr><td>Objectives</td><td>Identify basic components or structures of the Nervous System</td></tr>
<tr><td>Competencies</td><td></td></tr>
<tr><td>– Knowledge</td><td>Basic concepts of neuroanatomy</td></tr>
<tr><td>– Ability</td><td>Associate definitions with the correct concept</td></tr>
<tr><td>– Attitude</td><td>Attentiveness</td></tr>
<tr><td>Procedures</td><td>– Choose one person as leader, a second person as reader/recorder.
– Put slips of paper numbered 1 to 16 in a bag. Alternatively, you could print one copy of the concepts document, cut each numbered item into its own slip, and draw those from the bag.
– Split the assembled players into groups of 3-6 players – each member of the group with a different bingo card. You could have a winner in each group, depending on how the cards are distributed.
– Explain the game. Display the instructions provided in the PowerPoint presentation.
– The leader takes one number from the bag and hands it to the reader.
– The reader finds the associated concept in the chart below or in the separate concepts document and – without saying the concept -- reads the definition aloud twice.
– Keep the chosen number slips together so that you can check them against the winners’ bingo cards.
– Allow a minute or two for the group to discuss quietly and to place markers on their bingo cards.
– Repeat until someone cries “Bingo!”
– Confirm the card is marked correctly and announce the winner.</td></tr>
<tr><td>Materials</td><td>– PowerPoint presentation
– Bingo cards (6 cards are provided in a separate document)
– Beans or Beads (to mark concepts)</td></tr>
<tr><td>Clue</td><td>Definitions are taken or adapted mainly from BrainU. http://brainu.org/

<table>
<tr><th>#</th><th>Concept</th><th>Definition</th></tr>
<tr><td>1</td><td>Cerebral cortex</td><td>The largest and most complex part of the mammalian central nervous system; appears as tightly packed fat ridges (gyri) and narrow folds (sulci); responsible for all forms of conscious experience including perception, emotion, thought, and planning.</td></tr>
<tr><td>2</td><td>White matter</td><td>Areas of the brain made up of myelinated axons; the high lipid content of the myelin makes these areas appear whiter in freshly-dissected brain tissue.</td></tr>
<tr><td>3</td><td>Parietal lobe</td><td>Region of the cerebral cortex located behind the frontal lobe; processes higher sensory and language functions; contains association cortex.</td></tr>
<tr><td>4</td><td>Ventricles</td><td>Four fluid-filled cavities inside the brain.</td></tr>
<tr><td>5</td><td>Occipital lobe</td><td>The part of the cortex responsible for vision; the most caudal or posterior part of the cerebral cortex.</td></tr>
<tr><td>6</td><td>Thalamus</td><td>Interior part of the brain responsible for intermediate processing of motor and sensory functions and sleep.</td></tr>
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	7	Gray matter	Areas of the brain made up of neuronal cell bodies, dendrites, and synapses; without a lot of myelin, these areas appear grayer in freshly-dissected brain tissue.
	8	Amygdala	Part of the brain involved in processing, storing, and recalling emotions: fear and anger plus a range of positive emotions.
	9	Spinal cord	Part of the central nervous system located inside the backbone containing cell bodies and bundles of nerve fibers; connects the brain to different sensory and motor parts of the body.
	10	Hippocampus	The oldest part of cerebral cortex; responsible for spatial localization, formation of declarative memory, and transfer of short-term to long-term memories.
	11	Frontal lobe	Front region of the cerebral cortex; the part of the cortex responsible for attention, decision making, abstract thinking, problem solving, emotion, intellect, muscle movements, smell, and personality; contains the motor cortex.
	12	Cerebellum	The highly folded part of the central nervous system above or dorsal to the brainstem that helps control movement, balance, and muscle coordination.
	13	Temporal lobe	The part of the cortex responsible for hearing, olfaction, language, speech, learning, and memory; located in the ventral region of the lateral cerebral cortex near the temples and ears.
	14	Corpus callosum	A large bundle of nerve fibers (myelinated axons) that link the right and left hemispheres of the brain; enables the two hemispheres to share information.
	15	Meninges	Three membranes (the dura mater, arachnoid mater, and pia mater) that cover and protect the brain and spinal cord against shocks, knocks, and vibrations.
	16	Brainstem	The part of the central nervous system connecting the brain to the spinal cord. It contains pathways sending information to and receiving information from the spinal cord and peripheral nerves. It also contains neurons that control respiration and regulation of heart rhythms.
Other			