**“Older” Structures of the Brain**

Use the word bank below to label the structures of the brain. Also below, describe the function of each of the parts. Optional: color the parts with colored pencil to help you study!

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**Brainstem Cerebellum**

**Medulla Amygdala\***

**Thalamus Hypothalamus\***

**Pons Hippocampus\***

**Reticular Formation Pituitary Gland\***

**Cerebral Cortex (\* = part of limbic system, below**

**hemispheres, associated with emotions**

**and drives)**

**Tools for Studying the Brain**

**Electroencephalogram (EEG)**: an amplified recording of the waves of electrical activity sweeping across the brains surface. These waves are measured by electrodes placed on the scalp.

**CT (computed tomography) scan:** a series of X-ray photographs taken from different angles and combined by computer into a composite representation of a slice of the brain’s structure (also called CAT scan).

**PET (positron emission tomography) scan:** a visual display of brain activity that detects where a radioactive form of glucose goes while the brain performs a given task.

**MRI (magnetic resonance imaging):** a technique that uses magnetic fields and radio waves to produce computer-generated images of soft tissue. MRI scans show brain anatomy.

**fMRI (functional MRI):** a technique for revealing bloodflow and, therefore, brain activity by comparing successive MRI scans. fMRI scans show brain function as well as its structure.

Scientists now have the ability to voluntarily stimulate parts of the brain to not the effect. They can also create **lesions** (or small damages) to examine the effects.