Organization and Evaluation of Brain Function
This module introduces the general external topography of the brain. To illustrate the relationship between specific behaviors and brain function, the module begins by showing a racecar driver exercising his skill, and then presents graphic illustrations of the internal activity of his brain. The module reviews several methods of studying brain activity including the CAT scan, PET scan, EEG, and MRI.

Sheep Brain Dissection

Split Brain Experiments

The Brain Module

Neuroanatomy video with cartoons and singing

Neuroanatomy video good for showing four frontal lobes of cerebral cortex (cerebrum)

Neuroanatomy video. Low res images but introduces same areas as in introduction

What is a neuron?

Nerve Signaling

Animated tutorial on synaptic transmission

Molecular mechanism of synaptic function
Electrical and chemical signals are used by neurons to communicate with one another at contact points called synapses.

Animated tutorial on action potential

Confocal images of a climbing fiber axon forming synapses on a Purkinje cell and its dendrites emerge as if viewed through a microscope.

This is an animated video of the action potential going from the synapse to the cell body, down the axon and to the terminal. You can see the representations of ions entering and leaving the cell as well as the entire network of neurons in the brain. I like that this shows the neurotransmitter vesicles releasing, the neurotransmitters binding and that causing ion channels to open.

- How are the neurons networked to each other?
- What direction is the signal traveling?
- Where is chemical signaling used and where is electrical signaling used?
- What ions are represented by the plus and minus signs?

This is a similar animation, mainly showing the connections, but it shows the release of neurotransmitter really well.