Quick Reference Guide to Brain Compatible Learning Principles
Tools for Learning How to Learn
Starting the Connections
Interest

The brain prioritizes by meaning, value and relevance.

To have meaning, you must understand what you are learning.

In order to remember something thoroughly, you must be interested in it and think that it has value and relevance in your life.
Example of how your brain requires something to be of value.

How many times in your life have you seen a penny?

Click on the penny. See if you can choose the correct one.
Then close the window and return to PowerPoint presentation.

Link to Common Cents
http://www.exploratorium.edu/exhibits/common_cents/index.html
Intent to Remember

Your attitude has much to do with whether you remember something or not.

A key factor to remembering is having a positive attitude that you get it right the first time.

Attention is not the same as learning, but little learning takes place without attention.
Basic Background

Your understanding of new materials depends on what you already know that you can connect it to.

The more you increase your basic knowledge, the easier it is to build new knowledge on this background.
An illustration

Click on the splotchy picture to the left to link to a larger version of the splotches. See if you can find a picture among the splotches? Then close the window and return to PowerPoint presentation.

If you had never seen a dalmatian, would you have been able to find it?
Controlling the Amount and Form of Information
Selectivity

You must determine what is most important and select those parts to begin the process of studying and learning.
Meaningful Organization

You can learn and remember better if you can group ideas into some sort of meaningful categories or groups.
An illustration

Meaningful Organization

Study the letters below for 30 seconds.

IB MJ FKTW AUS ACD
Now in your notes, list the letters.

How did you do?

Could you have done better if you had organized them differently?
IBM MJ FKTW AUS ACD

IBM
JFK
TWA
USA
CD
Strengthening Neural Connections
Recitation

Saying ideas aloud in your own words strengthens synaptic connections and gives you immediate feedback.

The more feedback you get, the faster and more accurate your learning.
Visualization

The brain’s quickest and probably the longest-lasting response is to images. By making a mental picture, you use an entirely different part of the brain than you did by reading or listening.
Association

Memory is increased when facts to be learned are consciously associated with something familiar to you.

Memory is essentially formed by making neural connections.

Begin by asking, “What is this like that I already know and understand?”
Allowing Time to Solidify Pathways
Consolidation

Your brain must have time for new information to establish and solidify a neuronal pathway.

When you make a list or review your notes right after class, you are using the principle of consolidation.
Distributed Practice

A series of shorter study sessions distributed over several days is preferable to fewer but longer study sessions.