MEMORIZATION

Many college courses have a vocabulary of special terms that a student must learn before he can communicate intelligently about the subject. Thus, he is often faced with the task of somehow learning a large number of new words in a relatively short period of time. This exercise sheet is intended to give practice in a systematic approach to memorization that may simplify this job.

**Instructions:** Use a large card or other opaque object (magazine, etc.) to mask the example answer for the item until after putting down your answer.

Let us assume that the list of terms below is part of one you might have to learn for Geology. Carefully follow the steps given for memorization. If you want to get the maximum use from this exercise, do as much of the work as you can on your own before looking at the example.

**Part I - Initial Learning Process**

In one sitting, go through all the terms listed below using the steps described next.

- **Step One:** Memory Search  
  - Ask yourself if anything in your past experience or knowledge relates to the term you want to learn. If you recall any related information, you probably can remember the definition of the new term by connecting it with the other information.

- **Step Two:** Mnemonic Connection  
  - If Step One is insufficient to help you remember the term, try to make an "artificial" mnemonic connection. Ask yourself:
    1. Does the term sound or look like any word I already know? If so, can I make up some sort of imaginary connection between the two?
    2. If #1 does not work, does the first syllable of the new term match the first syllable of any words that I know could be used to make a connection?
    3. If that does not work, is there any other way I can make a connection between the new word and one that I already know? (Perhaps a word that rhymes with the term, etc.)
    4. If all else fails, you will have to resort to simple rote memorization.

**Terms To Learn**

1. **TERM:** Mountain Range - a somewhat continuous arrangement of peaks, ridges, and valleys.  
   a. **MEMORY SEARCH:** If you can recall any related information, make a short note in this space.

   b. **MNEMONIC CONNECTION** (if Step "a" is not sufficient): Since "mountain range" is a fairly commonplace term, this step will probably be unnecessary.

2. **TERM:** Mountain System - a group of mountain ranges.  
   a. **MEMORY SEARCH:**

   EXAMPLE: Perhaps the word "system" reminds you of other systems that are composed of smaller units.

   b. **MNEMONIC CONNECTION:** (probably not needed in this case)
3. **TERM**: Mountain Cordillera - a large regional grouping of mountain systems.
   
   a. **MEMORY SEARCH**:

   

   b. **MNEMONIC CONNECTION**:

   EXAMPLE: Perhaps visualize a cord (first syllable of "cordillera") surrounding a group of mountain ranges.

4. **TERM**: Delta - usually a triangular accumulation of sediment found where a river flows into a sea.
   
   a. **MEMORY SEARCH**:

   EXAMPLE: If you know that the word "delta" refers to something triangular, you should have no trouble remembering the meaning. Simply visualize the triangular formation at the head of a river.

   b. **MNEMONIC CONNECTION**:

5. **TERM**: Karst Topography - land surface dotted with numerous depressions caused by fallen roofs of caves.
   
   a. **MEMORY SEARCH**:

   

   b. **MNEMONIC CONNECTION**:

   EXAMPLE: The first three letters, "kar" might remind you of "car". Then simply visualize a car driving over bumpy terrain.

6. **TERM**: Magma - a pasty liquid that is the primary source of volcanic lava and ash.
   
   a. **MEMORY SEARCH**:

   

   b. **MNEMONIC CONNECTION**:

   EXAMPLE: The first three letters, "mag", are common to many words. You strategy might be to choose one word that can be connected with the term. For instance, if you choose the word "magnet", you can visualize a magnet turning molten from heat.

7. **TERM**: Lithosphere - the solid portion of the earth.
   
   a. **MEMORY SEARCH**:

   EXAMPLE: Sometimes the prefix of a term gives a useful clue to the term’s meaning. If you know that "litho" means "stone" then it is easy to remember what "lithosphere" means.

   b. **MNEMONIC CONNECTION**:

   EXAMPLE: Perhaps visualize the solid earth as being "lit".
Memorization (cont.)

8. **TERM**: Igneous Rocks - molten rocks that have solidified.
   a. **MEMORY SEARCH**:

   EXAMPLE: You might think of igneous rock as one formerly ignited.

9. **TERM**: Obsidian - lava that has formed glass.
   a. **MEMORY SEARCH**:

10. **TERM**: Sedimentary Rock - rocks formed from material deposited in water.
    a. **MEMORY SEARCH**:

11. **TERM**: Metamorphic Rock - rock that has been changed from its original form by heat, pressure, etc.
    a. **MEMORY SEARCH**:

    EXAMPLE: You might think of metamorphic rock as one formerly altered.
Part II - Review of Self-Test

This step is essential in order to make the work of Part I worthwhile. If you did only Part I and omitted Part II, the chances are that you would soon forget most of the connections that you made.

Procedure: About three to six hours after completing Part I, review the terms. First, while looking at each term without looking at its definition, try to recall the memory connection for that term. If you remember the connection, try to recite the definition of the term and then check yourself. If you do not remember the connection, take another look at it and spend some time visualizing it in relation to the definition. This review should help you to fix the definitions in your mind. Review again in the same way after a few hours if you feel the need to.
Part III - Practice Exam

On the next page is a practice exam for checking how well you know the terms. Let a few hours elapse between looking at the definitions and taking the exam so that only you long-term memory is being tested.

PRACTICE EXAM

Write the definitions for these terms.

1. Karst
2. Lithosphere
3. Obsidian
4. Cordillera
5. Metamorphic rock
6. Igneous
7. Delta
8. Sedimentary rock
9. Magma
10. Mountain System

Score (near correct)______________________

When taking this test, how useful were the memory connections? (circle one)

VERY USEFUL
SOMewhat USEFUL
ONLY SLIGHTLY USEFUL
USELESS

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