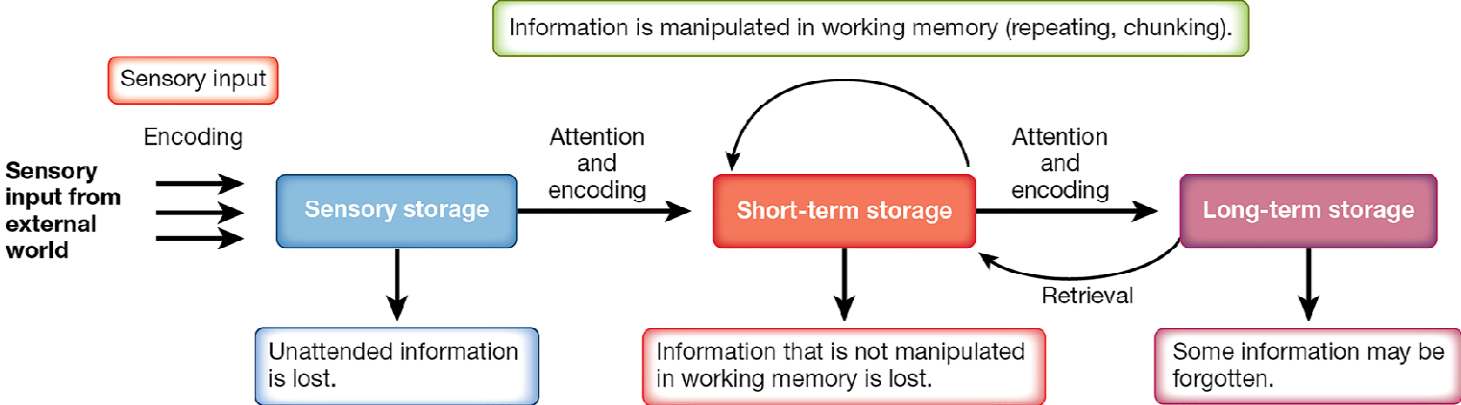


# The Model of Memory



**FIGURE 7.4**

## **Retrieval: Accessing Information**

**Recall:** A test of long-term memory that involves retrieving information without the aid of retrieval cues. This is sometimes called free recall. Recall involves a two-step process:

1. the generation of possible targets, and
2. the identification of genuine ones.
  - Name the Seven Dwarves.
  - Name Oregon's two senators in the United States Congress.

**Cued recall:** A test of long-term memory that involves remembering an item of information in response to a retrieval cue.

Retrieval cue: Anything that helps a person access information in long-term storage ([page 286](#)).

- Name the Seven Dwarves. Hint: One was always smiling, one was smart, one never talked, one seemed always to have a cold...

Having multiple cues increase the likelihood that you will recall what you are looking for. Why?

**Recognition:** A test of long-term memory that involves identifying correct information out of several possible choices. Unlike recall, the generation of possible targets is already done.

- Which of the following were among the Seven Dwarves: Sneezy, Sleazy, Dopey, Dippy, Hippy, Happy...?

## A Recall Test

### A Test for Recall

Close your eyes and try to *recall* the names of Santa's nine reindeer. Most people can only recall four to five names. Now turn to page 281 for a *recognition* test on the same material.



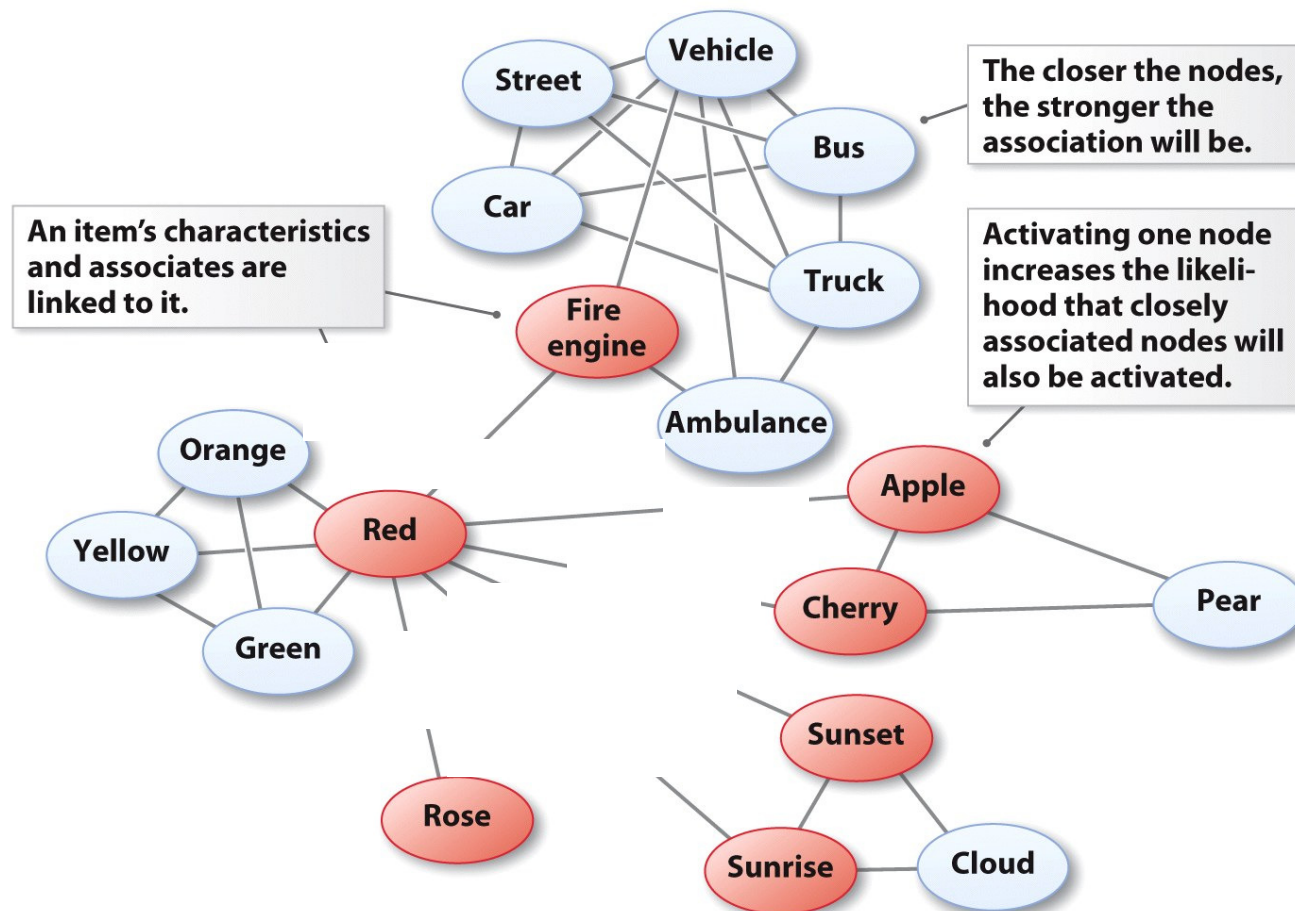
Michel Tcherevkoff Ltd. /The Image Bank/GettyImages

## **A Recognition Test**

Of the following names, which are the names of Santa's nine reindeer?

Rudolph, Dancer, Cupid, Lancer,  
Comet, Blitzen, Crasher, Donner,  
Prancer, Dasher, Vixen

## Isolated Information Makes Retrieval Difficult



*Psychological Science*, 4/e Figure 7.17  
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When you learn information without context or meaning, you lack links to access your prior knowledge. This makes retrieving the information more difficult.

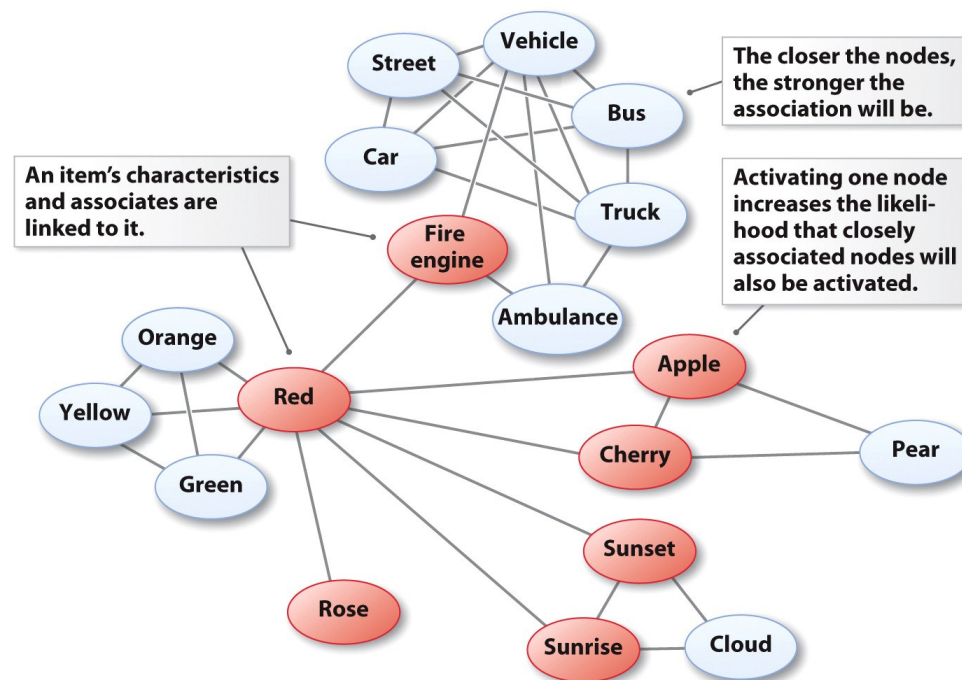


To make your own semantic network, visit <http://vue.tuft.edu/>

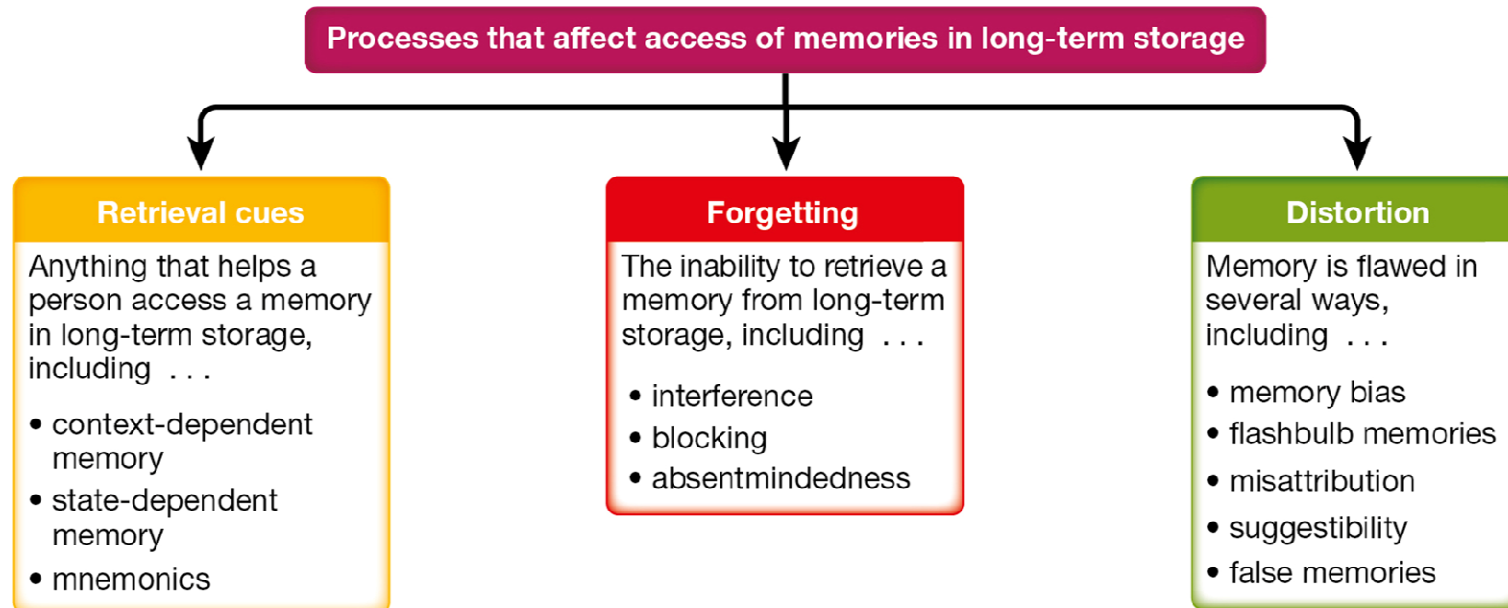
## Storage: Associative Networks

Associative network model: Memories are organized in long-term memory storage based on the meaning of information. Concepts are connected through their associations. The closer the concepts are to each other, the stronger the association between them.

Tapping into the associations in long-term memory facilitate retrieval.



## How Do You Retrieve Memories?



**FIGURE 7.25**



## **Retrieving Information**

When encountering difficulties in retrieving information, try to make a recall exercise a recognition exercise with retrieval cues.

- Identify possible retrieval cues. Connecting information in an associative network provides retrieval cues.
- When doing a homework assignment, have a list of possible choices (recognition) in front of you rather than trying to pull your options from memory (recall).
  - When doing assignments in Psy 201, 202 and 203 that asks you to identify psychological concepts, it is easier when you have a list of options in front of you. Generate that list.
- On exams that allow you to write on them, write notes, clues, mnemonics, an associative network/concept map or outline on the exam to serve as retrieval cues.
- When I ask a question in class and you don't know the answer, generate possible options instead of saying "I don't know".

Stress and sleep deprivation can impair recall and evaluation of options.

## **Retrieval: Encoding Specificity Principle**

The encoding specificity principle says that if the context of the encoding of information match the context of retrieval, the retrieval of information is more likely to occur.

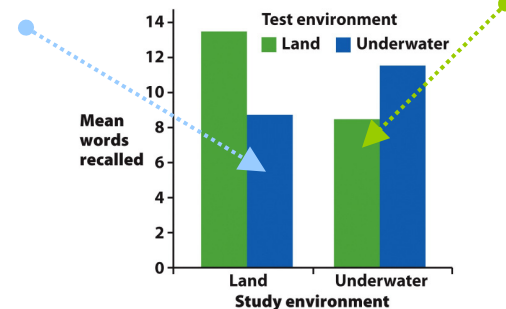
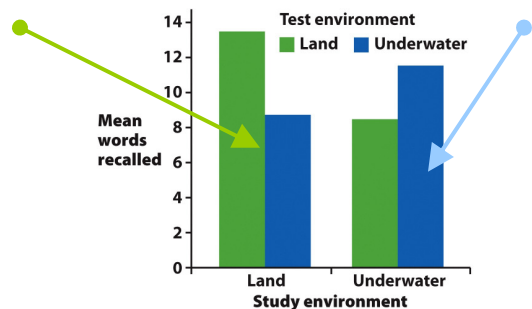
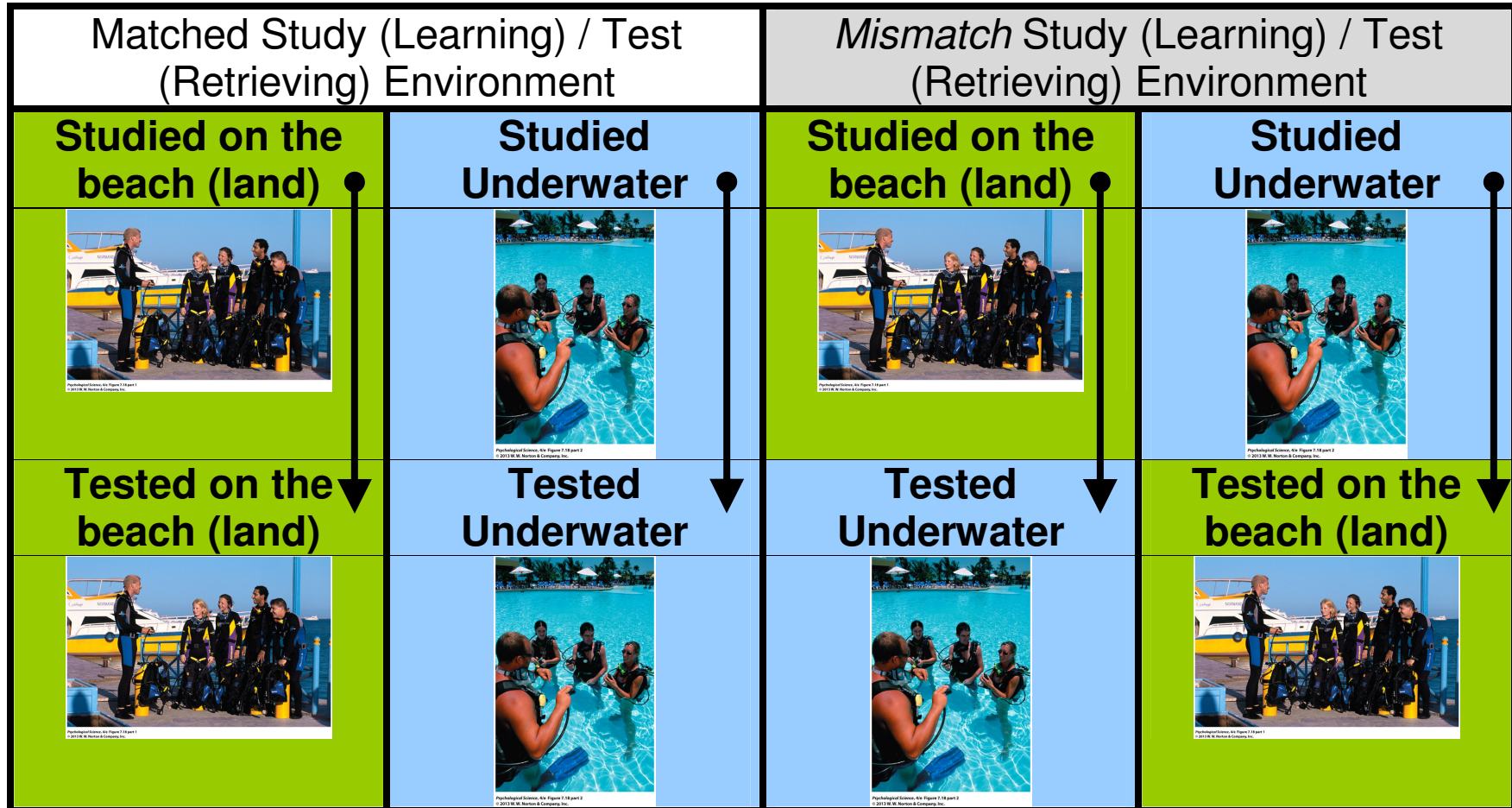
Types of encoding specificity principle (a term not used by your textbook) can be

- context-dependent memory (context effects)
- state-dependent memory
- mood congruence

## Retrieval: Encoding Specificity Principle

Context-dependent memory	<p>The tendency of information to be retrieved easier when the retrieval occurs in the same setting or environment as the original learning of the information.</p> <ul style="list-style-type: none"><li>• I cannot recall my voice-mail number until I get to the phone.</li><li>• Wolverine couldn't remember his past until he returned to the "secret lab"</li><li>• Or remember your name outside of class</li></ul>
State-dependent memory	<p>The tendency to remember information when the physiological state matches the physiological state in which it was learned.</p> <ul style="list-style-type: none"><li>• If you learned information while using drugs, being tired, etc., it is more likely that you will recall that information while in the same state (i.e. drugged state, tired, etc.).</li></ul> <p>However, drugs impair your ability to learn, so taking drugs does not facilitate learning.</p>
mood congruence	<p>The tendency for a given mood to evoke memories that is consistent with that mood.</p> <ul style="list-style-type: none"><li>• Happy memories are easier to retrieve when in a happy mood.</li><li>• Sad memories are more likely to be retrieved than happy ones when in a sad mood.</li></ul>

## Retrieval: Encoding Specificity Principle



## Retrieval: Mnemonics and Acronyms

A mnemonic and acronym are memory strategies for placing information in an organized context to facilitate memory.

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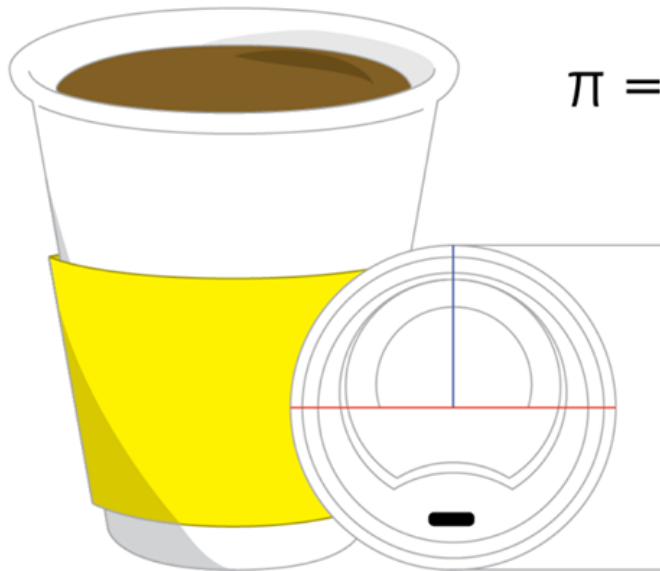
What are the Great Lakes?	HOMES
Do you add acid to water, or water to acid? (do you add hydrofluoric acid (HF) to the water, or the other way around?)	AAA
When checking vital signs, what is the sequence in which you check?	ABC
What are the five personality factors in “The Big Five” model of personality?	OCEAN or CANOE
What is the relationship between sine, cosine, tangent and the length of each side of a triangle?	SOH CAH TOA
What are the nine “planets”?	My Very Earnest Mother Just Showed Us Nine Planets
What are the colors of the spectrum?	ROY G. BIV

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## Mnemonics

May I have a large container of coffee?

3. 1 4 1 5 9 2 6



$$\pi = 3.1415926$$

$$\text{Area} = \pi r^2$$

$$\text{Circumference} = \pi d$$

