

Table 3.1 displays a summary of the three stages of information processing that may help you keep their properties in mind as you progress through this chapter.

The Flow of Information During Learning

As indicated earlier, information is transformed—or processed—as it passes from one stage of memory to the next. What are the processes assumed to be responsible for these transformations? Let's examine a particular example from *A Tale of Two Readers* to trace what may happen during learning. Suppose Sarah comes to this sentence in the story she is reading: "Visitors to the town are always struck by the beauty of its wide, azalea-lined avenues." The letters on the page stimulate Sarah's visual sensory register, which receives and briefly records a representation of the information as it originally occurred. Then, familiar shapes of letters and words are perceived as pattern recognition takes place. It is at this point that the process of attention also exerts an effect. An unfamiliar word may cause processing to slow, because added attention must be paid to individual letters rather than whole words.

Upon entering working memory, the information is coded conceptually, i.e., takes on meaning. Meanings of the individual words are retrieved from long-term memory to assist Sarah in constructing a representation of the whole sentence. Since the sentence is more than a few words, internal rehearsal may also occur to preserve the first few words in memory while the end of the sentence is being perceived.

Finally, in order for the information to be processed into long-term memory, Sarah must encode its meaning. This means that the representation

TABLE 3.1 *Summary of Memory Stages*

Properties	Stages		
	Sensory Register	Short-Term Store	Long-Term Store
Capacity	Large	Small	Large
Code	Literal copy of physical stimulus	Dual code —verbal —visual	Episodic/semantic
Permanence	0.5 seconds	20–30 seconds	Permanent
Source	Environment	Environment and prior knowledge	Effective encodings from STS
Loss	Decay	Displacement or decay	Irretrievability

Source: From McCown, R. R., Driscoll, M. P., & Roop, P., *Educational psychology: A learning-centered approach to classroom practice*. Boston: Allyn & Bacon, 1996. Reprinted with permission.