Memory

Chapter 7

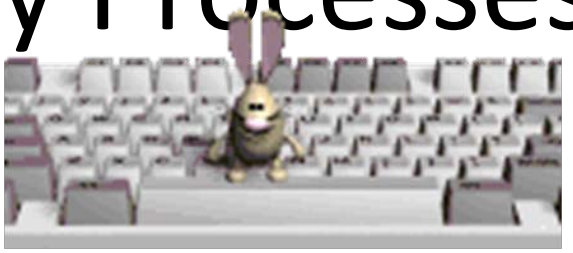
Chapter 7 Outline

- Basic _____Processing
  - Encoding
  - _____
  - Retrieval
- _____.
- Systems of Memory
  - _____.
  - _____.
- Physiology of Memory
- _____Your Memory

Human Memory: Basic Questions

- How does _____get into memory?
- How is information _____in memory?
- How is _____ pulled back out (_____) from memory?

_____ Memory Processes



- _____.

  - putting _____into a form that our memory _____can use

- _____.

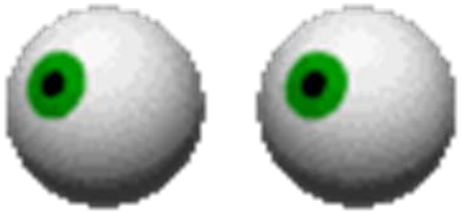
  - maintaining _____over time

- _____.

  - getting information out of memory

_____.

- Process of putting _____into a form that the memory system can accept and use
  - _____ codes
  - _____ codes
  - _____ codes



Dictionary

_____and Retrieval

- _____.
  - Process of _____information in memory _____over time

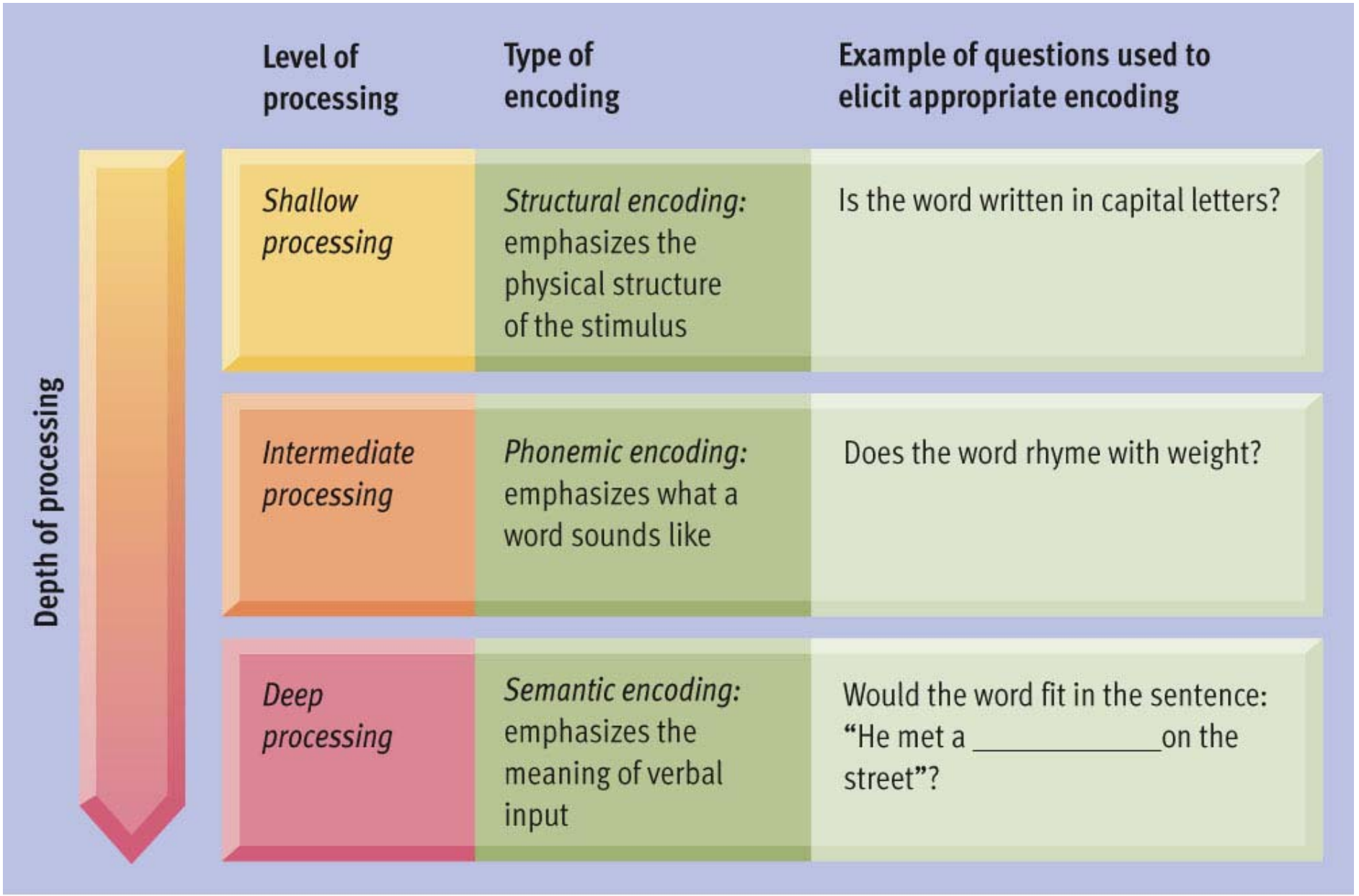
- Retrieval
  - Process of _____information stored in memory

_____: Getting Information Into Memory

- The role of_____.
- Focusing on different _____of stimuli leads to different kinds of codes
- Different types of _____influence how well you_____.

_____: Getting _____into Memory

- Levels of_____.
  - Incoming _____processed at different levels
  - Deeper _____= longer lasting memory codes.
  - **Encoding levels**:
    - _____ **(case)** = shallow
    - _____ **(rhyme)** = intermediate
    - _____**(thinking about the_____)** = deep

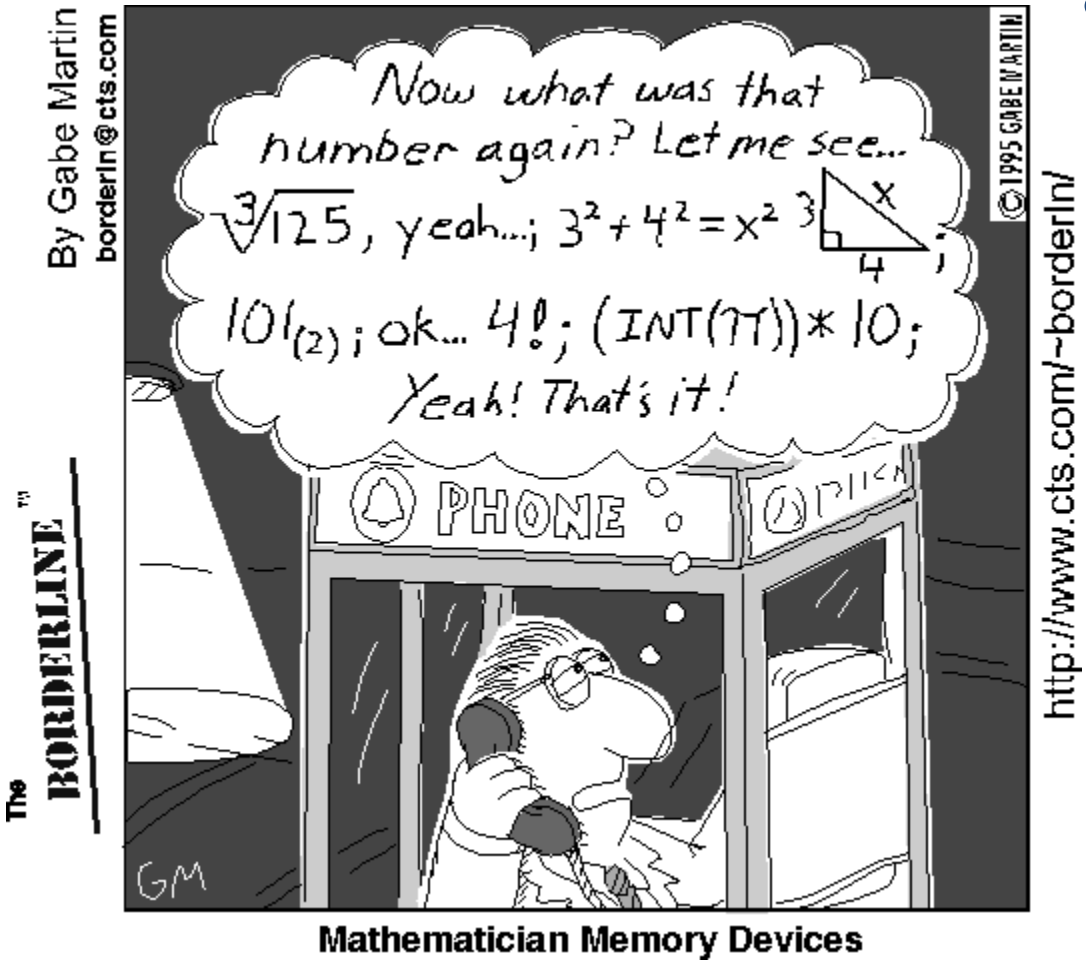


Enriching_____.

- _____= linking a _____ to other information at the time of_____.
  - Thinking of examples
  - _____processing
- _____**Imagery** = creation of _____images that represent words to be remembered
- _____= techniques to make abstract information easier to remember
  - _____.
  - _____.

Learning Objective 1, 2, 3

_____Encoding



- _____.
  - _____ for organizing information in order to remember it

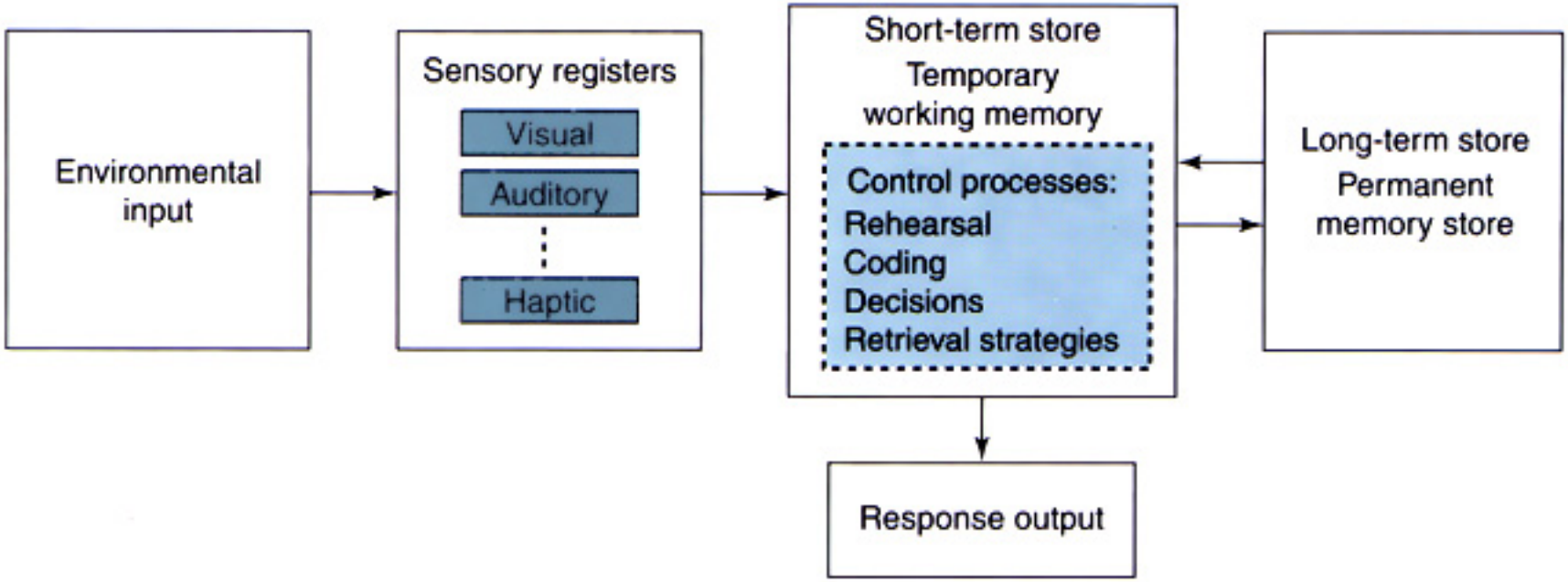
Encoding: _____Processing

- _____ Imagery
  - Easier for _____objects
    - _____ versus giraffe
- Dual-_____ theory
  - Form _____ and _____ codes
  - Two codes _____memory
  - _____ word uses _____ codes

_____: Information Processing

- _____: information storage in computers ~ information storage in human memory
- **Information-processing _____.**
  - Subdivide memory into _____ **different stores**
    - _____, _____, _____.

Atkinson and _____ Model of Memory_____.



_____ Memory

- Brief _____ of information in original sensory _____.
  - Allows for _____recognition
  - Large_____.
- _____– persists approximately _ second
- _____ - slightly longer

_____ Term Memory (__TM)

- **Limited _____** – about **20 seconds** without _____.
  - _____ – the process of repetitively verbalizing or thinking about the information
- **Limited capacity** – magical number **__ plus or minus ___.**
  - _____ – grouping familiar stimuli for storage as a _____unit

_____-Term Memory as "_____Memory"

- STM not limited to _____ encoding
  - _____ and visual codes
- Loss of information not only due to _____.
  - _____.
- **_____(1986)** – 3 components of working memory
  - _____ **rehearsal loop**
  - _____ **sketchpad**
  - **Executive _____ system**

Storage: Long-Term Memory

- _____ Capacity
- Permanent storage?
  - _____memories
- How is _____represented and organized in_____?
  - _____ and Scripts
  - _____Networks
  - Connectionist Networks and _____ Models

Knowledge _____.

- _____.
  - Understanding what _____ is like or how it works
    - Remember information consistent with _____.
- Semantic _____.
  - Organization of _____ information
    - _____.
- _____ Networks
  - Patterns of activation of interconnected units

The Fading _____.

- Some unusual, shocking or tragic events hold a special _____ in memory.
- Called _____ memories because the term captures the surprise, illumination & photographic detail that characterize them.
- Why are these memories so easy to recall?
  - _____.
  - _____.
  - _____and _____both involved in encoding
- Even _____ memories have errors.

_____: Getting Information Out of Memory

- The _____ phenomenon
  - Failure of _____.
  - _____ cues are missing
- Reinstating the _____.
  - Context cues
- _____ memories
  - _____ effect
- _____ monitoring

_____ Cues

- Provide a _____.
- But may also lead to _____ memory
- Did you _____ the word "_____" from the earlier list?
- Why? _____.
- The context of the word list implied ___ should be part of the list
- Memory is _____/reconstructive

The _____ of Memory

- Memory for an event may include specific information, context, _____, emotions, and information that we saw or heard before or after the event
- _____ effect
  - _____ post-event information
- Source _____.
  - Inability to determine where you got the information
- _____ Bias
  - Remember information that fits cultural beliefs or makes sense

The _____ of Memory

- _____ likely when:
  - You have thought or heard about the _____event many times.
  - The image of the event contains many details.
  - The event is easy to imagine
  - You focus on _____ reactions to the event rather than what actually happened.
  - Increases _____, although inaccurate

Importance of Memory on Eyewitness Testimony

- Eyewitnesses are asked to recall events just as they happened
  - a long _____after the actual event
  - not always _____.
- Factors which influence _____.
  - Cross_____identification.
  - _____ effect
    - Misleading _____information

_____Postevent Information (Loftus & Palmer, 1974)

- Subjects saw the same film of a car accident
- Later, different subjects were asked: How fast were the cars going when they:
  _____?
  _____?
  _____?
  _____?
  _____?

Loftus and Palmer, Results

- Subjects _____of speed varied with the verb they got in the question phase of the experiment.
- Subjects who got the _____verb "remembered" the cars were going _____.
  - Smashed: _____mph
  - Collided: _____mph
  - Bumped: _____mph
  - Hit: _____mph
  - Contact: _____mph

Loftus and Palmer, Results

- Two weeks after the film: Did you see the broken _____?
  - note: No _____ was present in the original film
  - 34% of "_____" reported "yes"

_____’s Testimony

- Under what conditions are _____ more suggestible?
  - Being very _____.
  - When asked suggestive, leading questions
  - _____ questioning
- Not limited to children– adults are susceptible too

_____’s Testimony

- Research by Leichtman and Ceci (1995)
- If asked if a visitor committed acts that had not occurred, few _____ year olds said yes
  - _____% of 3-year olds said “yes”
- When investigators used techniques taken from real child-abuse investigations, most children said yes.
  - _____ leading questions
    - “When Sam tore the book, did he do it on purpose?”
  - _____ questioning

Why We Forget

- **_____Encoding**
- **_____failure**
- **_____.**
  - Memory trace fades over time
- **Interference**
  - Pro_____.
  - Retro_____.
- **_____.**
  - Authenticity of repressed memories?
  - Controversy

When should we question recovered memories?

- If person says he or she has memories of first _____.
- If over time the memories become more and more _____.
- If therapist used _____techniques such as _____, dream analysis, age regression, guided imagery and leading questions.

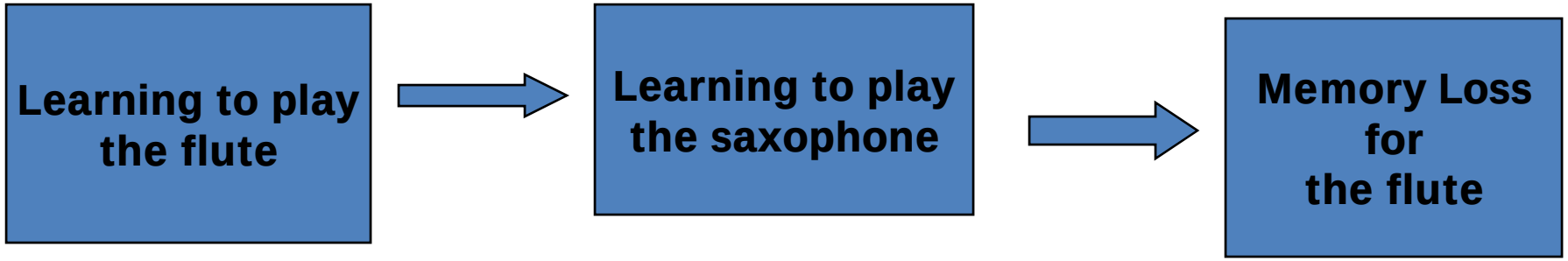
Forgetting: _____.

- Similar items _____with one another
- _____interference
  - Learning _____info interferes with recall of old info
    - What is your old phone number?
- _____interference
  - _____info interferes with new info
    - Confusing recently learned soc terms with previously learned psych terms
    - Where did you park your car today? (not yesterday)

Interference Theory

_____ or _____?

Example A



Example B

_____of Memory

- _____.
  - Medial _____lobe memory system
    - Includes the _____.
    - Important in the _____of memories
      - Formation of new long term memories
  - _____.
    - Important in memory for emotions
  - _____cortex
    - Memories are distributed across the _____.

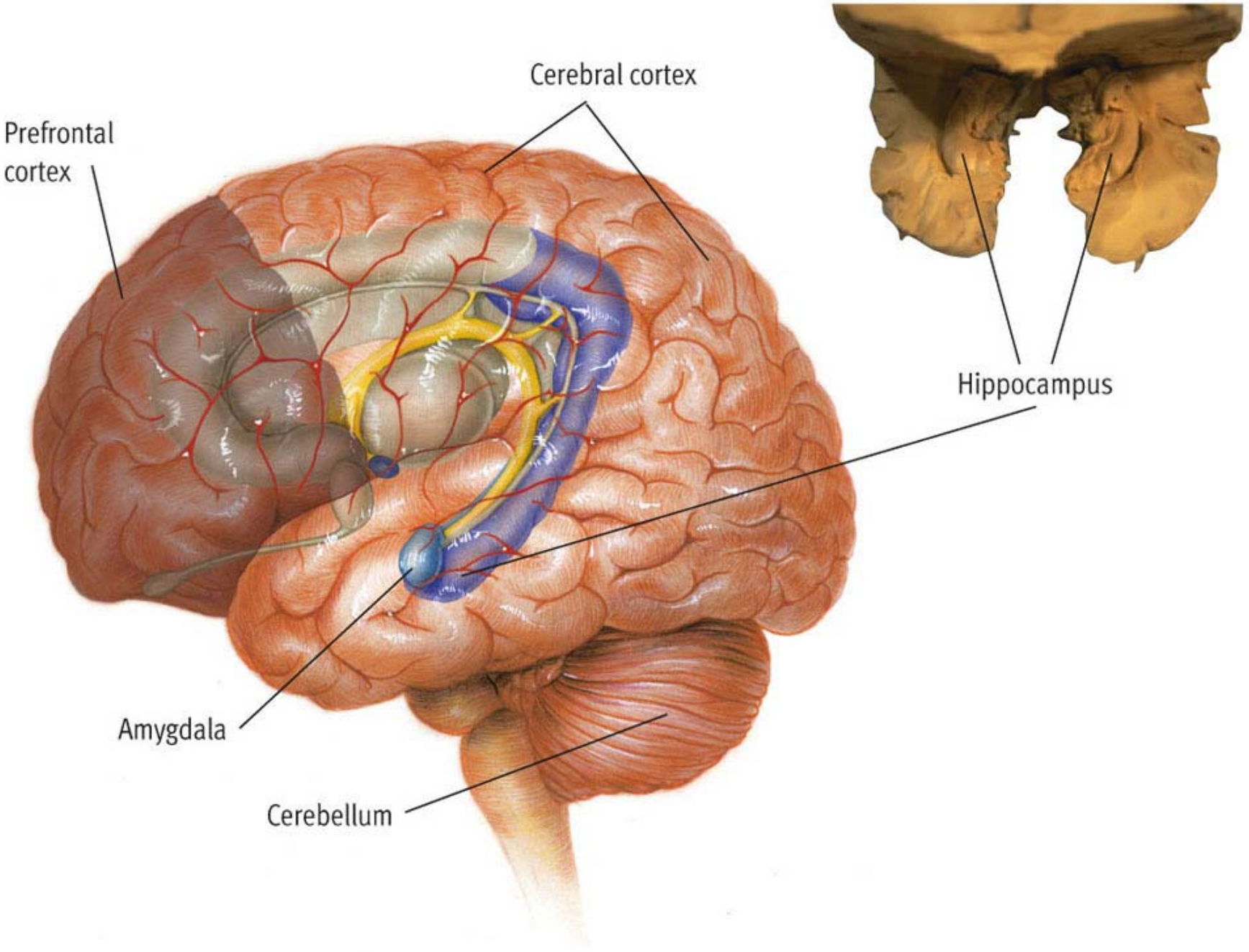
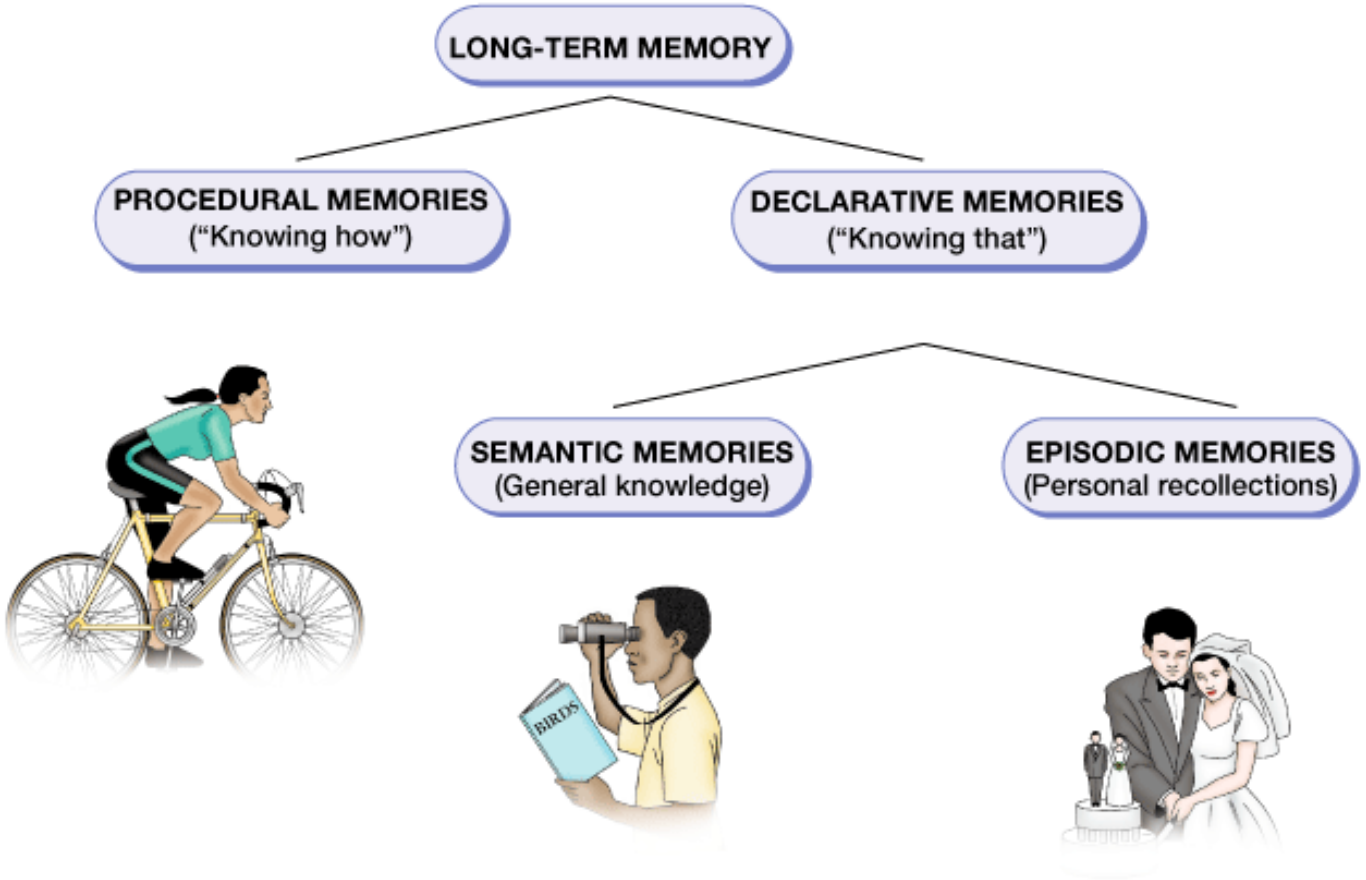


Fig. 7.16, p. 224

Types of _____Memories

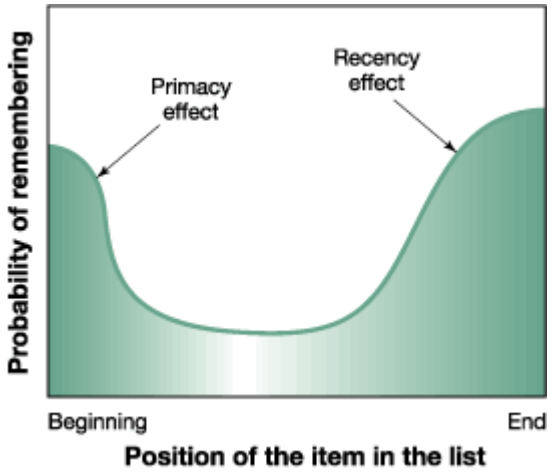


Improving Your Memory

- _____information
  - Be aware of the _____position effect
- _____practice
- Organize information and use _____processing
- Use _____and visual imagery

_____Effect

- The tendency for recall of first and _____items on a list to surpass recall of items in the _____of the list



_____Practice

- _____practice
  - "Cram" studying into one chunk of time
- Distributed practice
  - Distribute study over _____of time with breaks
  - Leads to better _____.

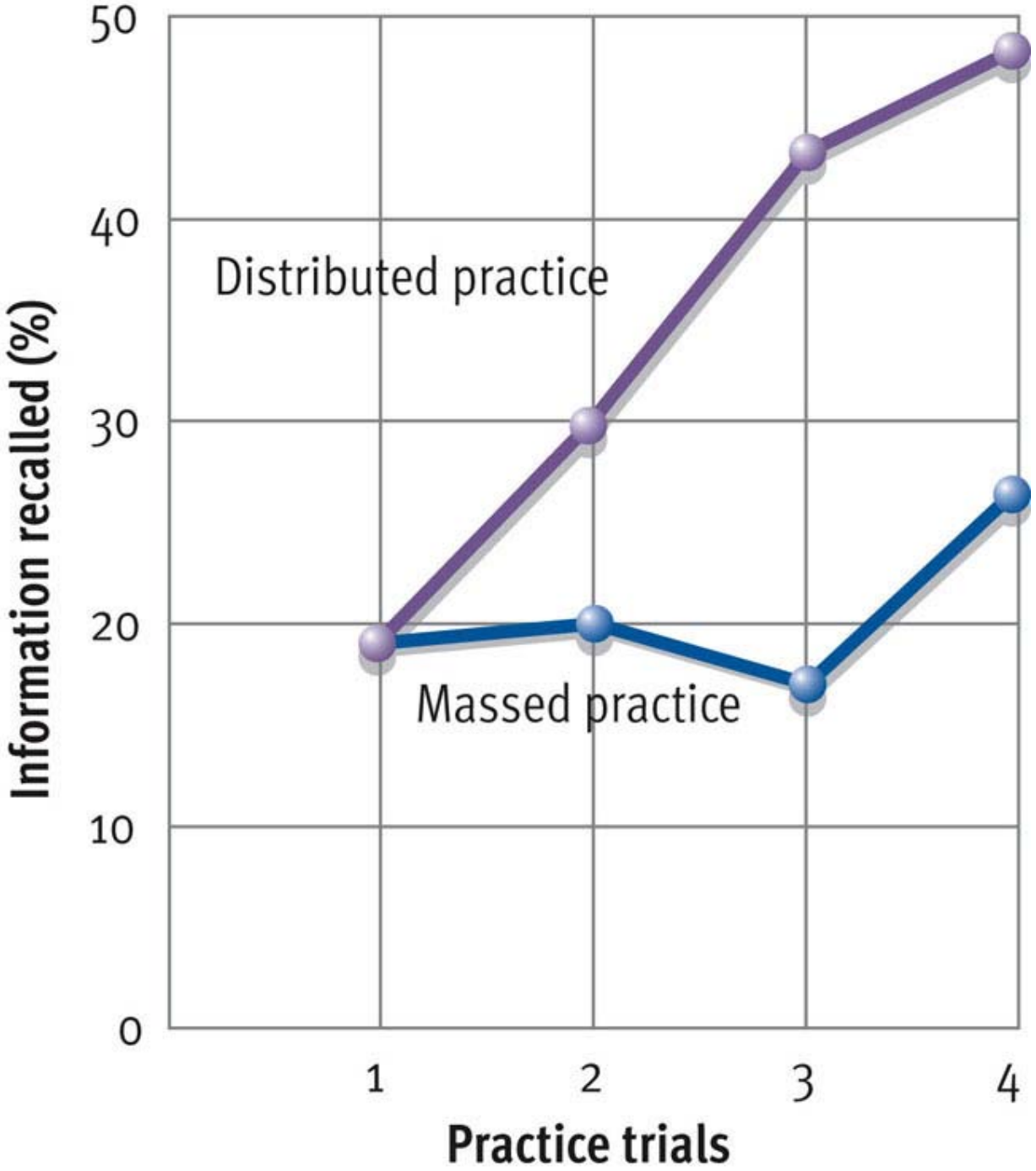


Fig. 7.20, p. 229