

# Learning & Memory

A Refresher from ED PSYCH 101

# Short-term memory

- Holding tank for information attended to
- Limited capacity
  - Last for seconds
  - 7 +/-2 chunks
- Information either moves to **working memory** or discards

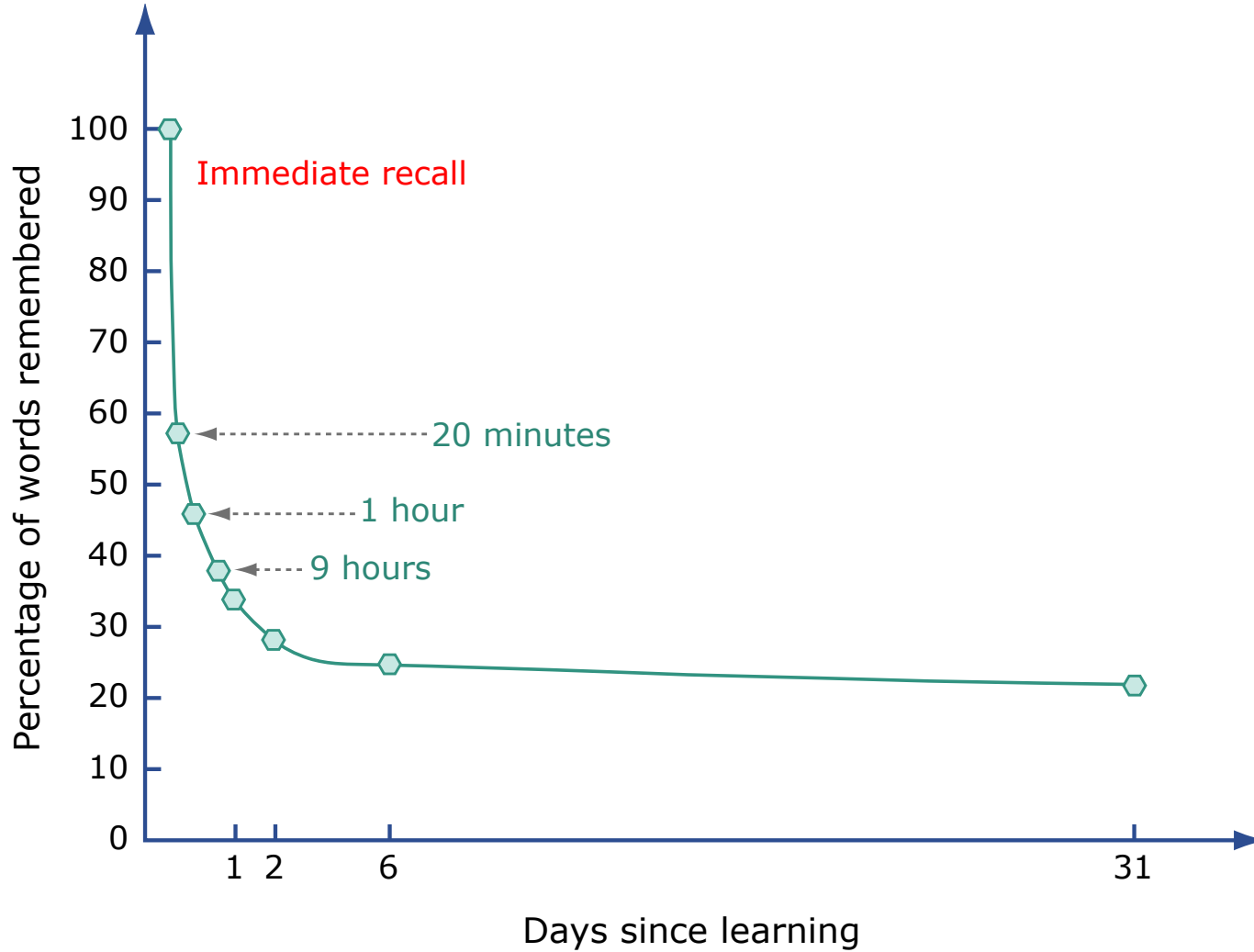
I will read aloud a series of numbers.

Wait until I say “Record” to write down what you’ve heard.

## **TEST OF DIGIT SPAN**

# Ebbinghaus' curve of forgetting

(The loss of information over time when there is no attempt to retain it.)



Source: MIT OpenCourseWare.

# Working Memory

- Storage of information in working memory involves
  - **Connecting**: to prior knowledge
  - **Chunking**: break into tasks
  - **Clustering**: group into categories
  - **Rehearsing**: repetition
- Limited storage capacity
  - We can remember 4 things for about 10-20 secs

- <https://www.youtube.com/watch?v=vJG698U2Mvo>

BUS

monkey

mosquito

CAR

TABLE

tiger

pencil

DRINK

KEY

ZEBRA

stone

gold

DOG

cat

BANANA

bus

NOTEBOOK

flower





# Memory & Recall

- Shallow v. Deep Encoding
- Memory & Attention is improved with meaning and connection to background knowledge.
- The more critical thinking one does, the deeper the learning.
- There is great power in assigning meaning when introducing new materials.

# Power of Removing the Hippocampus

- <http://ed.ted.com/lessons/what-happens-when-you-remove-the-hippocampus-sam-kean>

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