

## Memory Tips

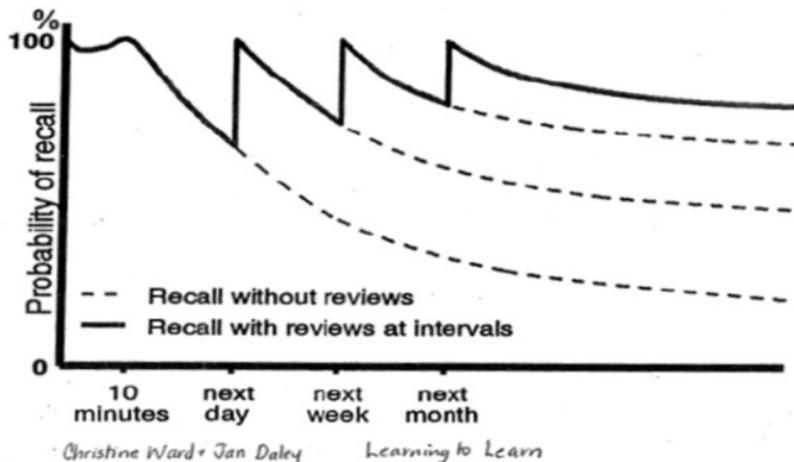
**Memory:** The ability to store and retrieve (recall) information.

**Learning:** Updating or replacing the stored information found in our long-term memories.

### Become an Active Learner

**Figure 1**

*Probability of Recall*



*Note:* As much as 70-90% of learning could be lost if we do not actively work with the new information. From *Learning to learn: Strategies for accelerating learning and boosting performance*, by C. Ward and J. Daley, 1998, p. 49. C. Ward. Copyright 1998 by Jan Daley, Christine Ward.

### Work to Understand the Material

It is not usually enough just to listen or just to read. Memory processes work by linking and associating.

#### Activate your background knowledge.

Think about how you can link the new material to material you already know.

Ask yourself: How is this the same as something I already know? How is it different?

#### Relate / Link / Associate to Current Knowledge

Fit new material in with what you already know. Ask and answer questions.  
Ask and answer lots of questions

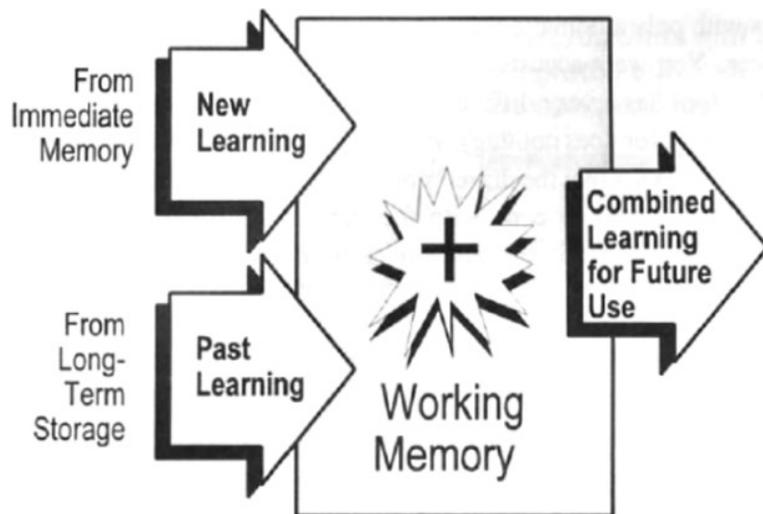
**Examples:**

- What does the author mean?
- What is an example (or an analogy) to illustrate the idea?
- Does this information change ideas I have previously held?
- How can I use this information? Does it have meaning for me?
- What are the consequences of this information?

Discuss the information. BE CAREFUL - it is important to work towards an accurate understanding.  
Lay down your memories carefully.

**Figure 2**

*New Learning and Past Learning Coming Together in Working Memory is One Part of Transfer*



*Note.* New learning and past learning coming together in working memory is one part of transfer. The learner's understanding of how the combined learning can be used in the future is the other part of transfer. From *How the brain learns* (2nd ed.), by D. A. Sousa, 2001, p.137. Corwin Press Sage Publications. Copyright 2001 by Corwin Press.

Select

- Select the important items to remember
- Pick out key points and choose key words
- Ask: What are the most important things I need to remember? What are the key words? What are the key ideas?
- Paraphrase / put it into your own words
- Summarise
- Observe and pay attention, focus and concentrate on what you want to learn

## Organise into a Meaningful System

### Group information

- Organise what you are seeking to remember into a meaningful system
- Look for patterns – visual patterns/sound patterns/semantic patterns
- Sort into categories. Link objects/make sets/ make a mindmap
- List main points in logical order of importance
- It is possible to increase the items working memory can handle at one time through chunking/grouping items, so memory sees the group as one item, not separate fragments.

### Example

**Which is the easiest to remember (1) or (2)?**

**1.**

apricot	knee	camel	caravan
puppy	nectarine	nose	apple
donkey	pear	yacht	villa
lion	elbow	bungalow	mouth

**2.**

<b>Fruit</b>	<b>Animals</b>	<b>Home</b>	<b>Body</b>
apricot	camel	caravan	knee

nectarine	puppy	yacht	nose
apple	donkey	villa	mouth
pear	lion	bungalow	elbow

Try and organise your notes into 5 - 9 bits of organised information.

## Use a Multisensory Approach

We can learn by:-



What we **SEE**

Develop the “Art of Noticing”

Look carefully

Visualise

Create mental images

Create a mental picture of a scene containing the items to be remembered. Draw the picture to help you remember it.

Remember where items are on a page; this can help recall patterns flowcharts etc.

Stop and draw a diagram, chart or picture; underline or highlight.

Use colour to make notes stand out.



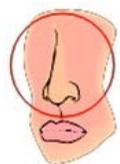
What we **HEAR**

Read important sections or ideas aloud.

Use audiotapes.

Practise saying items you want to recall aloud if possible.

Use rhythm or song. Put words or ideas into a tune.



What we **TASTE**  
What we **SMELL**

This can be literal or in your imagination. What

What we **TOUCH**

As above.

Some people use tapping of fingers etc to aid recall.

What we <b>FEEL</b>	Emotions/feel it.
What we <b>FEAR</b> (can inhibit our learning)	
What we <b>DO</b>	Explain what you have learned to someone else Tell a friend Take notes Use flashcard cards Take part in an activity Draw a picture

## Mnemonics [Memory Aids]

The best are personal ones. Most work by association.

### FIRST LETTER ASSOCIATION

#### Examples

**Acronym** Make up a word using the first letter of the words to remember.

#### First example

ANZAC: Australia & New Zealand Army Corps.

#### Second example

ROY G BIV: The colours of the rainbow  
[red/orange/yellow/green/blue/indigo/violet]

**Anagram** Very similar to an acronym except the order of letters is changed to make a more memorable word.

**Acrostic** Make up a phrase where the first letter of each word is the same as the first letter of the word you want to remember

#### First example

To remember the elements in the periodic table  
Hydrogen, Helium and Lithium ( . . . ) make up a phrase eg  
Happy Henry likes ( . . . )  
Happy = H = Hydrogen  
Henry = He = Helium  
Likes = Li = Lithium

## ASSOCIATION

**Story** Make up a story using the items on the list.

It is easier to recall a story than a series of unrelated words, especially if you need to remember the words in a specific order.

### Mindmap

### Rhyme

**Rhythm and Movement** Use dance/rap/song

### Second Example

Acrostics can be used to help remember the spelling of a word.

e.g., Arithmetic : A rat in the house might eat the iced cake.

### Example

To remember the names of the seven dwarfs:

When I woke up I felt **DOPEY**. I'm not usually **SLEEPY** in the morning, but this morning I felt **GRUMPY** because I had to visit the **DOC** . . .

See online guide to [Mindmapping](#)

### Example:

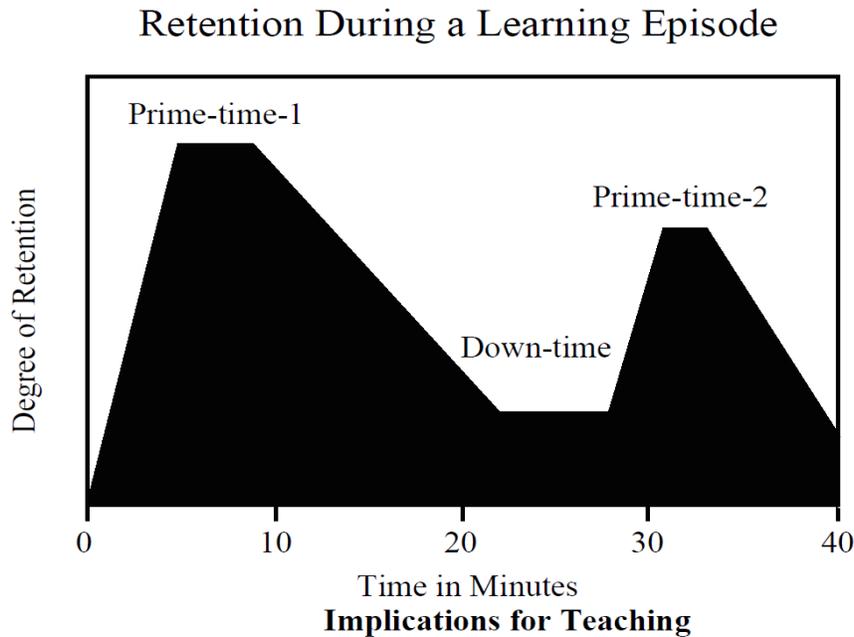
I before E except after C . . .

## Primacy and Recency

People often remember best the first and last things encountered.

**Figure 3**

*Retention in a 40 minute learning episode*

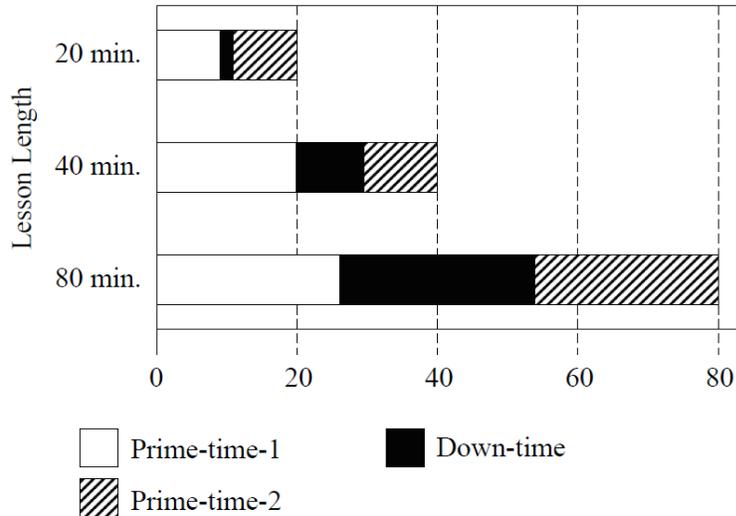


*Note:* This graph shows that the best learning time is at the beginning of a session and the second best at the end. From *Primary/recency effect*, by D. A. Sousa, n.d.

(<http://www.lancsngfl.ac.uk/secondary/math/download/file/How%20the%20Brain%20Learns%20by%20David%20Sousa.pdf>).

**Figure 4**

*Approximate Ratio of Prime-Times to Down-Time During Learning Episodes*



*Note:* By dividing each learning episode into 20-minute segments, there is proportionately more prime-time to down-time. From *Primary/recency effect*, by D. A. Sousa, n.d.

(<http://www.lancsngfl.ac.uk/secondary/math/download/file/How%20the%20Brain%20Learns%20by%20David%20Sousa.pdf>).

### Study with Breaks

There is a higher probability of remembering if you keep the learning episodes short and meaningful.

### Speed up retrieval by review and rehearsal

Review the previous session in each new session. Repeat, review and rehearse material. Use active repetition – recite/recall/write out.

It's good to revise notes soon after they are made and to review:

**Daily** - All notes for the day

**Weekly** - Summaries of notes for the week

**Monthly** – Concepts and ideas for the month

Most of us remember things if they make sense/ Are familiar/ Are grouped or linked in some way /Are experienced or repeated regularly.

Overlearning material will increase your retrieval speed and improve your confidence.

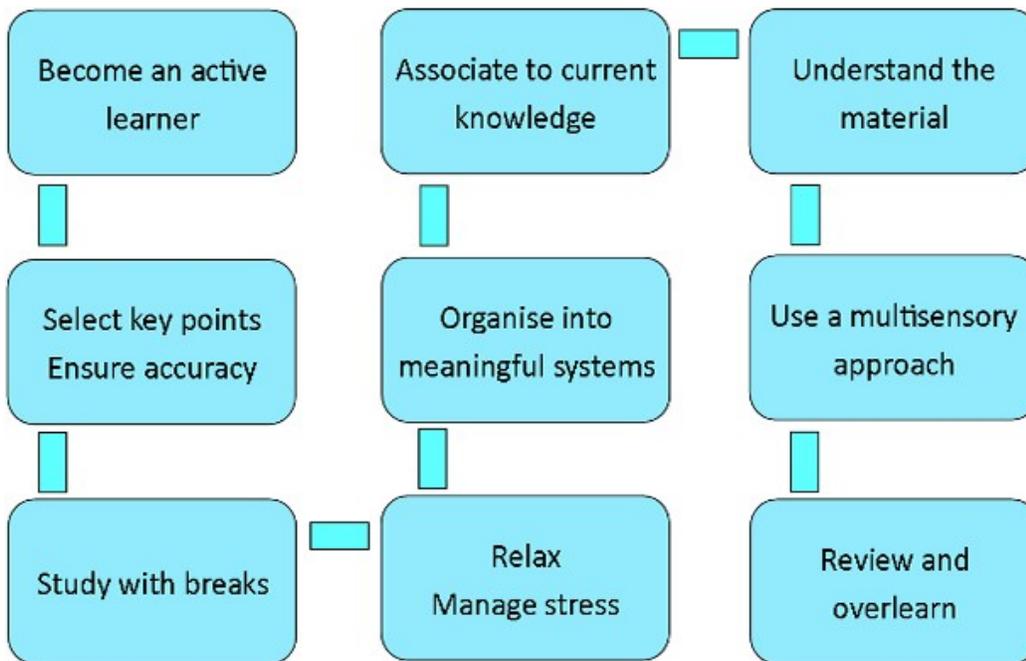
### Stress is the great enemy of learning

Relaxation decreases mental blocks

To learn effectively, it is important to manage your stressors (the things that cause you stress) and to look after yourself. Try and achieve a balance in your life.

**Figure 5**

*Effective Learning*



## Materials adapted from the following sources:

Cotterell, S. (1990). *The study skills handbook*. Macmillan Press.

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