

Chunking Technique



What is the Chunking Technique?

- It is a technique which can improve your **memory**.
- Chunking is the process of taking individual pieces of information (**chunks**) and **grouping them into larger units**.

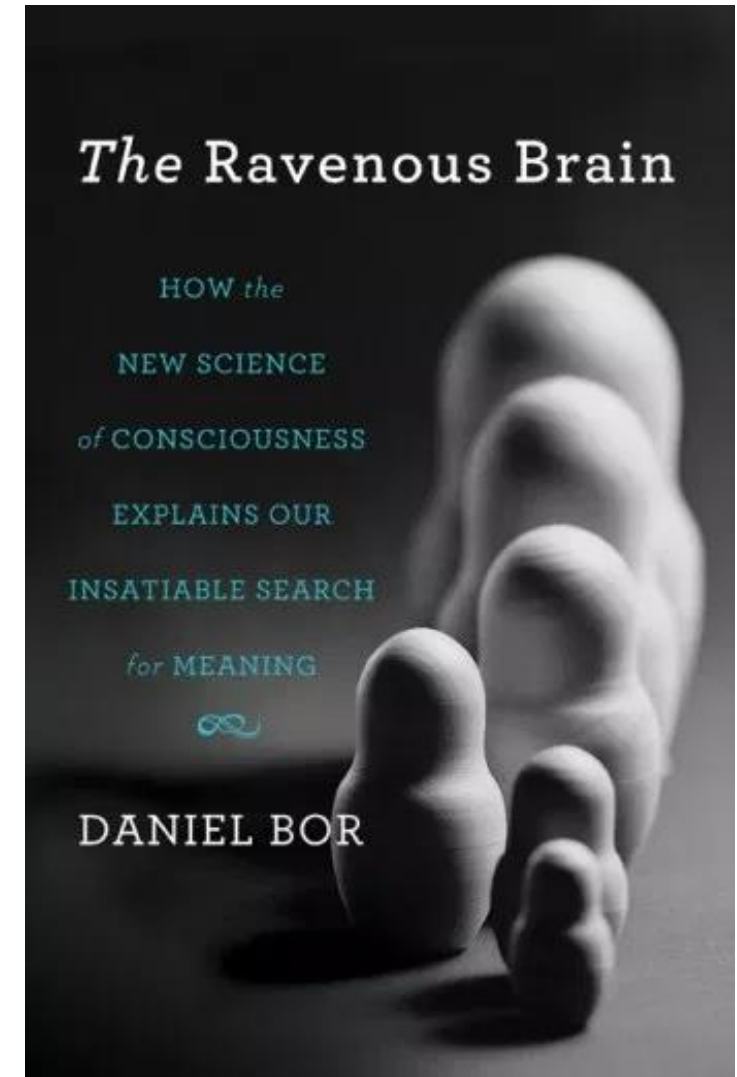


By grouping each piece into a large whole, you can improve the amount of information you can remember.



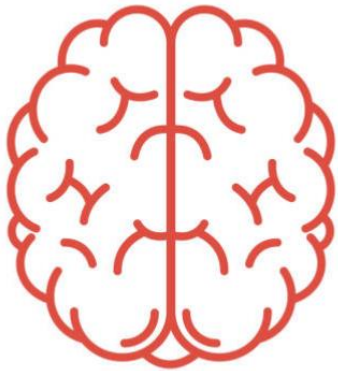
The Science of chunking

Daniel Bor, author of *The Ravenous Brain* states that chunking represents our ability to "hack" the limits of our memory.



Experiment: The Power of Chunking

- An undergraduate volunteer took part in a psychology experiment.
- He had an average IQ and memory capacity.



- Researchers read to him a sequence of **random digits** and asked him to **say the digits back** in the order he'd heard them.
- If he was **correct**, the next trial sequence would be **one digit longer**; if **incorrect**, one digit shorter.

3 9 8 0 7 6 2 1

Experiment: The Power of Chunking

The twist....it took place over **two years**, where the young man did this task for an hour a day, four days a week.



The Experiment: What happened?

Initially, he was able to

20 months later, he was

How did he do this?

sequence

digits long

3 9 8 0 7 6 2

9 9 8 0 7 6 2 8 5

4

1 9 8 2 7 8 2 8 5

4

3 9 2 0 7 1 2 8 6

9

3 9 8 0 1 1 2 2 5

2

1 9 2 0 7 6 2 8 5

3

2 7 3 4 0 1 8 2 5

4

5 1 8 3 7 7 2 8 4

5

9 9 4 1 0 8 2 6 5

6

The secret of chunking

- The young man was a **track runner**.
- He decided to see certain number groups as running times, for instance, 3492 would be transformed into 3 minutes and 49.2 seconds - around the world-record time for running the mile.
- He was using his memory for well-known number sequences in athletics to prop up his working memory.



The secret of chunking

He then realised he could combine each running time into a superstructure of 3 or 4 running times – and then group these superstructures together again.

He just learned to cram more and more into each item in a pyramidal way, with digits linked together in 3s or 4s, and then those triplets or quadruplets of digits linked together as well in groups of 3, and so on.

Can you think of a
time when you
grouped information
to help you learn it
better?



Why is 'chunking' useful?

- Our memory system becomes far more efficient.
- It helps you to recall the relevant information in your exams.
- Information becomes easier to retain and recall.
- It improves your creativity.



The chunking process

1. Break down larger amounts of information into smaller units.
2. **Identify similarities** or patterns.
3. **Organise** the information.
4. **Group information** into manageable units.



The chunking process

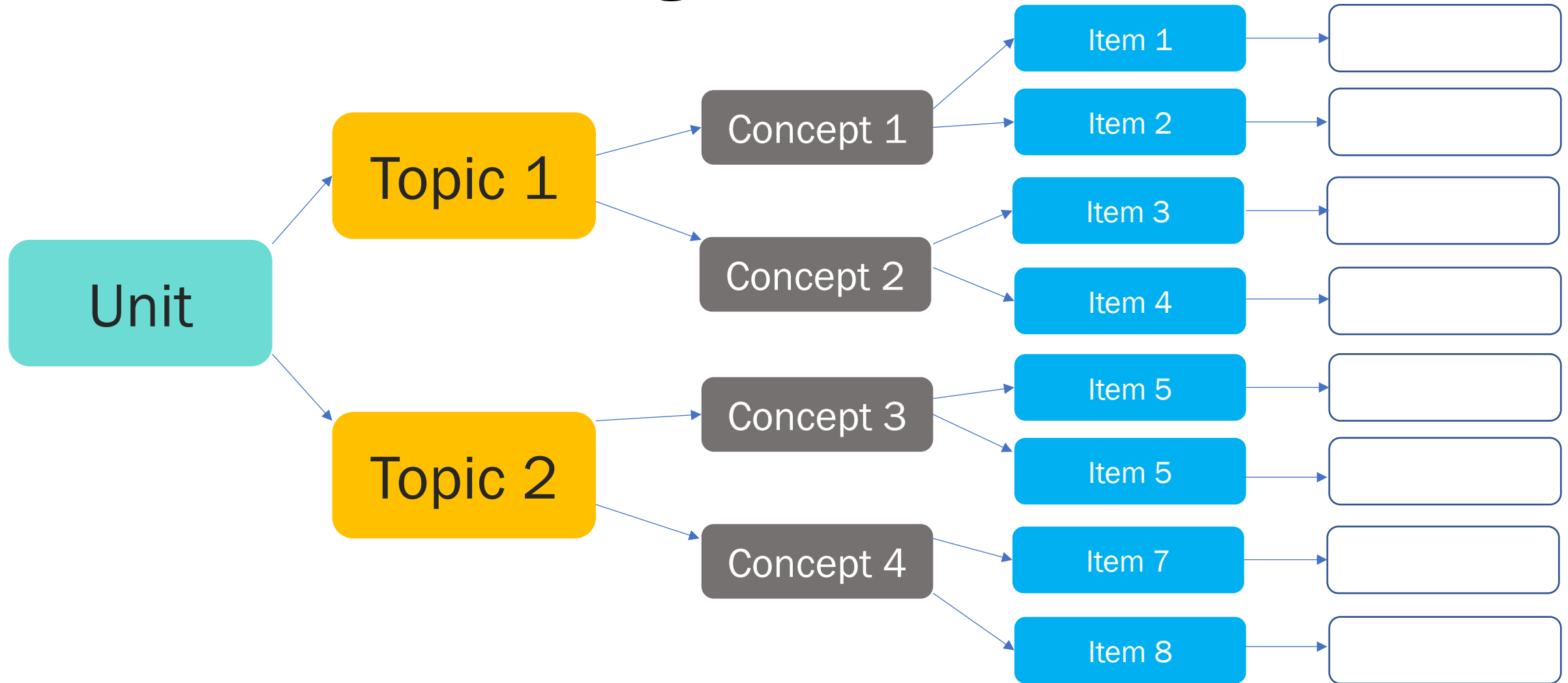
Use **HEADINGS** and **TITLES** for different sections.

Use **TABLES** to summarise **LARGE AMOUNTS** of **DATA**.

Use **BULLET POINTS** to summarise and **CLARIFY** **IMPORTANT POINTS**.

Combine quick **ILLUSTRATIONS** with **TEXT** to create **VISUAL ASSOCIATIONS**.

Example of chunking



Are you ready to do some chunking?

FOCUS

Chunking requires YOUR attention on the learning.

UNDERSTANDING

You need to fully understand information before chunking material.

CONTEXT

You need to go beyond understanding the initial problem or concept and see when, where and how to apply it.

Top tips to effective chunking

1. Practice:

- Challenge yourself to remember lists of things, whether it's a shopping list, vocabulary words or important dates.

2. Look for Connections:

- Try to link groups together.
- Think about what they have in common and what makes sense.



Top tips to effective chunking



3. Associate:

- Linking groups of items to things from your memory can also help make things more memorable.

Top tips to effective chunking

4. Incorporate other memory strategies:

- For example, you might use mnemonics as a way to chunk different units of information. If you need to remember a list of things—such as buying **figs, lettuce, oranges, apples, and tomatoes**—you can create a word out of the first letters e.g. "FLOAT".



Top tips to effective chunking

5. Separate your revision

- Separating revision into relevant sections can help you digest everything and remember it more easily.
- If you can create **links** between different bits of information and put them in meaningful categories it can help you remember them better.



Chunking Challenge

TASK:

- Choose a subject and a topic within this to focus on.
- Create your own chunking method to learn the information for your chosen topic.



Form patterns

Develop your
tactics

Make
connections

