Memory strategies

Diagrams
Many people find it easier to recall details if they are attached to a diagram showing the structure or process being learned. You can put detailed labels onto diagrams, especially in science subjects, and have them on your wall until you can recall the sets of information with your eyes shut. You can show the steps in a process (like a flow diagram) and label the stages and keep them in view until you can recall each step and its place in the sequence.

Charts and tables
Charts usually summarize sets of facts about two or more theories and models (or a group of characters or even unicellular organisms). Making a chart enables you to visually recall the number of facts about a concept, where a particular one has special features, and how many differences there are between it and the others.

Mind maps
Mind maps can be used to enhance your memory as they present a picture of a topic and all its parts. Being able to recall a mind map - its shape, the number of branches and sub-branches - provides you with the keywords relating to that topic and the framework showing how these are interconnected. To be useful, they have to
- be detailed
- be tidy and easy to read
- have things that enhance memory such as
  - numbering
  - little diagrams/icons
  - colours
  - your own examples

Imagery (the link method)
Pictures can be recalled more easily than verbal descriptions alone. Also, concrete images such as car or boat are easier to remember than abstract concepts such as intelligence or love. One imagery method you can use to enhance retention and recall is the link method.

**Examples**

If you need to remember bananas, carrots, lemonade, and honey, you could imagine a monkey eating bananas, while planting carrots, and watering them with lemonade. The sweet syrup in the lemonade attracts bees who use the syrup to make honey (a ridiculous image, but a memorable one!).

**Roman room**

The Roman room strategy extends the location/association technique with a visualization strategy that usually involves the rooms of a house. You need to be able to conjure up the room and all its parts and furniture in your mind easily. Links are then made by associating sets of information with each part of the room, the furniture and furnishings. The more novel or silly the association the easier it is to remember and therefore the better this technique works. It requires effort to set up the association but this means it is also effective once created.

**Roman room steps:**

1. Organize all your notes about a particular topic, unit or section of a subject area. Break the topic into sections and organize these so that you have all the important information - definitions, characteristics, uses, applications, examples, theories and theorists in a set.
2. Visualize a room that you are very familiar with.
3. Recall all the furniture in the room - you can include bookshelves, chairs of different kinds, and windowsills.
4. On each piece of furniture, place one set of information. Try to visualize the link in some way to enhance the memory. If you can make the link funny or incongruous, it will be easier to remember.
5. Practice recalling the set of information on each piece of furniture.
6. Practice visiting the room - visualize the furniture, and use the links to recall the sets of information relating to the topic in the room.
7. Repeat the process using another room for another topic.

**Acronyms**
Acronyms are words made from the first letter of the key words relating to a concept or process. They are good for remembering the correct order as well as helping you recall a complete set. Examples

BEDMAS: used by maths students to remind the order of operations (it stands for Brackets, Exponentials, Division, Multiplication, Addition, Subtraction).
TRACC: business memos should be Timely, Relevant, Accurate, Concise, and Clear.
ROYGBIV: used to remember the colours of the rainbow (Red, Orange, Yellow, Green, Blue, Indigo, Violet)

**Acrostics**
Acrostics are phrases or poems in which the first letter of each word or line functions as a cue to help you recall the words that you are trying to remember. Examples [hide]

Every Good Boy Deserves Fruit: used in music to remember notes on treble clef lines.
Betty Brown Runs Over Your Garden But Violet Grey Walks: used in engineering and technology to remember resistor colour codes and their values (Black, Brown, Red, Orange, Yellow, Green, Blue, Violet, Grey, and White).

**Rhymes and chants**
“i comes before e, except after c or when it sounds like an a, as in neighbor and weigh.”
Rhymes like this are an effective way to learn and recall material because they are more than just words on a page; people remember the rule partly by the rhyme and they also have a song-like quality to them that involves auditory processing as well as visual cues. Saying or repeating formulas or definitions in a way that has rhythm can help you remember this type of information. You can try a sing song type of ‘speech’ and some people actually ‘sing’ sets of information as this process reinforces their memory. In an exam you often find that you recall it in the same way - i.e with the same rhythm or tune.
Making a narrative
Another association strategy that can help you recall a set of information is the making up a story or narrative that links the information you need to remember in a novel way. The set of information you need to remember is associated within the narrative.
Examples include:

Some nurses have to remember the color of blood tubes and know what they are for. A narrative might be used to store and recall this accurately: “I have five aunties (anticoagulants). My plain aunt has 4 red dogs called biochemistry, serology, drugs and hormones; Aunt EDTA has 2 purple dogs called hematology and cell count; Aunt Oxalate has a grey dog called glucose, etc.” In this narrative, which could be made more elaborate if desired, the color of the dog is the color code of the tests and the dogs’ names are the purposes for the test.

Stories can even be used to memorize formulas such as the conversion from Fahrenheit to Centigrade \( F = \frac{9}{5}C + 32 \): “Friday (F) is the same as (=) the 9 to 5 (9/5) drag in college (C); and (+) I've only got 32 minutes to go!”

Chunking

“0800-83-83-83”
The above set of numbers illustrates chunking as well as rhyme. Chunking involves grouping material together rather than learning each item separately. Short-term memory can only deal with a limited amount of information (around seven items) before old information is ‘bumped out’ to make room for new information. Chunking things together enables people to remember more than just 7 separate items.
The above number comprises 10 digits: 0 8 0 0 8 3 8 3 8 3. But, when grouped into four chunks - 0800, 83, 83, 83 - it is far easier to remember. Formula are easily learned in chunks.

Self-talk or talk aloud
This strategy just involves you explaining a topic to yourself and checking that you can do so without ‘drying up’ or forgetting part way through an explanation.
It should be used after you have reviewed a topic once or twice. It is a good self-test of how well you know a topic. Self-talk is often combined with other methods such as chunking, especially if you are learning definitions, formulae, equations or sets of principles, acronyms and a Roman room. If you can fluently speak about a topic, you will be able to write fluently about the topic.

Self-talk step:

- Read over the notes of a particular topic or section of a topic. Check that you still understand the topic.
- Use a storage/rehearsal method such as reciting definitions, making short notes, writing lists, labelling diagrams, playing a tape recording, or making and using flash cards.
- Take a break - and maybe even move on to another topic or subject.
- After a break, go back to the first topic and test your recall by giving yourself a lecture on the topic. Talk aloud about all that you can remember.
- Monitor yourself - how fluently can you speak the information? Did you give theory and examples? Did you give differences and similarities to some other concept/s? Did you miss any important bits out or get stuck?
- If there were parts you could not recall, look up your notes, reread these parts and mark them in some way (e.g., with a highlighter or note) so that when you redo that topic you can give them extra attention.
- Another talk aloud method is to turn your notes on a topic into a narrative and remember and recite it as a story with a beginning, middle and end as well as a who, when, where, what, why and how.

Adapted from: https://owl.massey.ac.nz/study-skills