

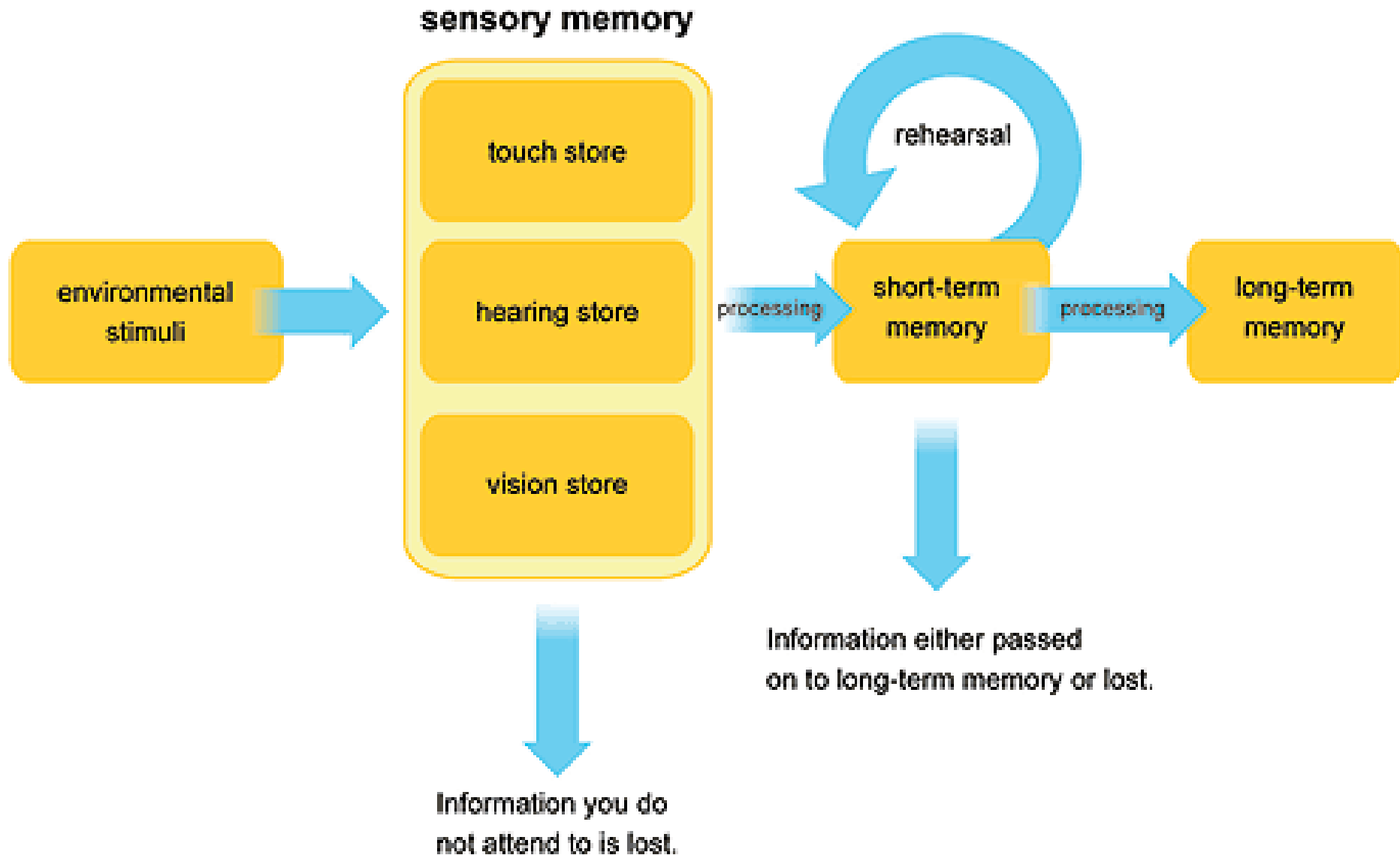


Your Memory



The Science behind revision

3 Types of Memory



Sensory memory..

..takes the information provided by the senses

Capacity:
unlimited

Duration:
0.25 seconds



Short-term memory

..receives
sensory
information
'attended to'

Capacity:

7 items

Duration:

30 seconds

My short term memory is.....wait,
what was I going to
say?



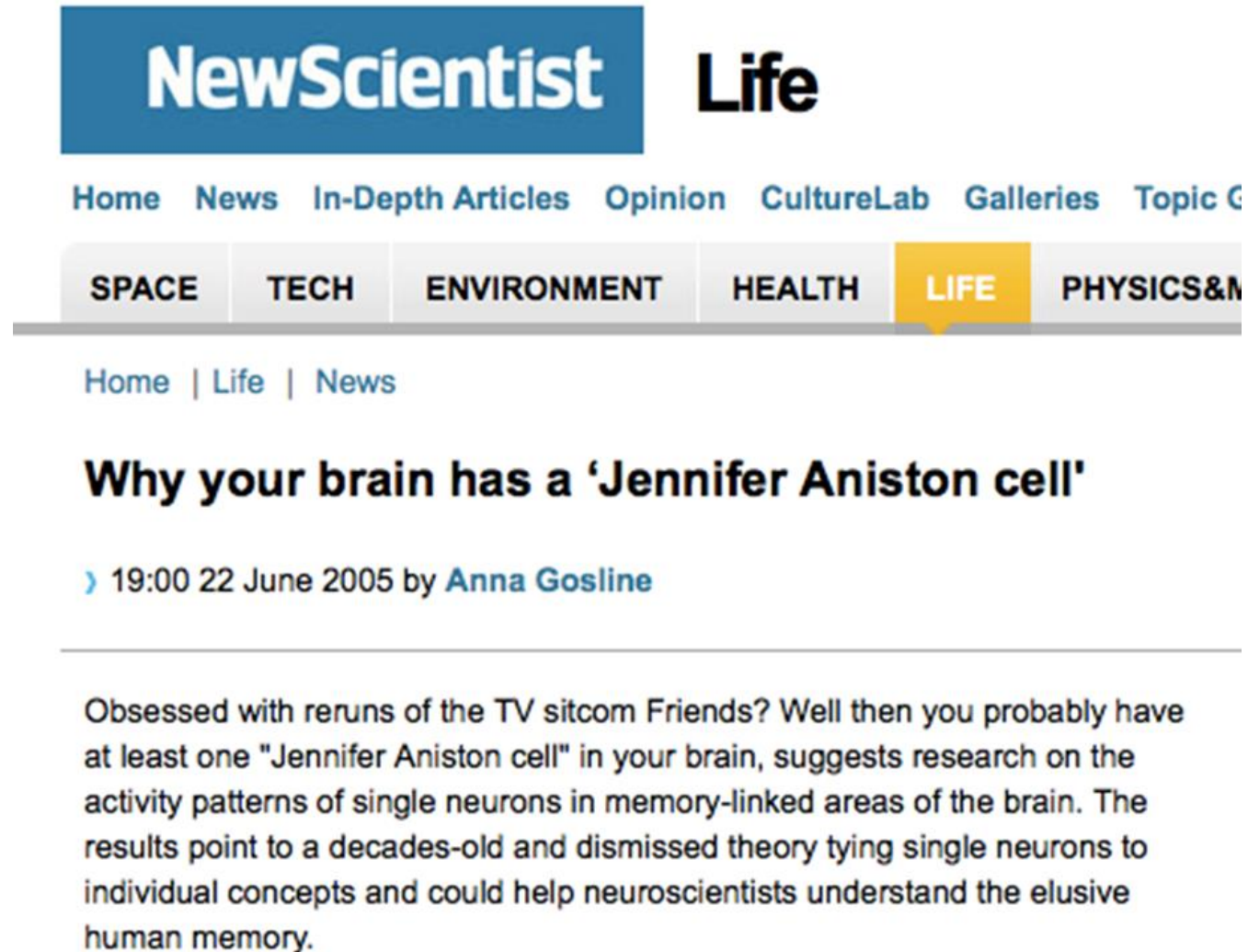
som^{ee}cards
user card

Long-term memory..

..receives
from short-
term
memory if
'rehearsed'

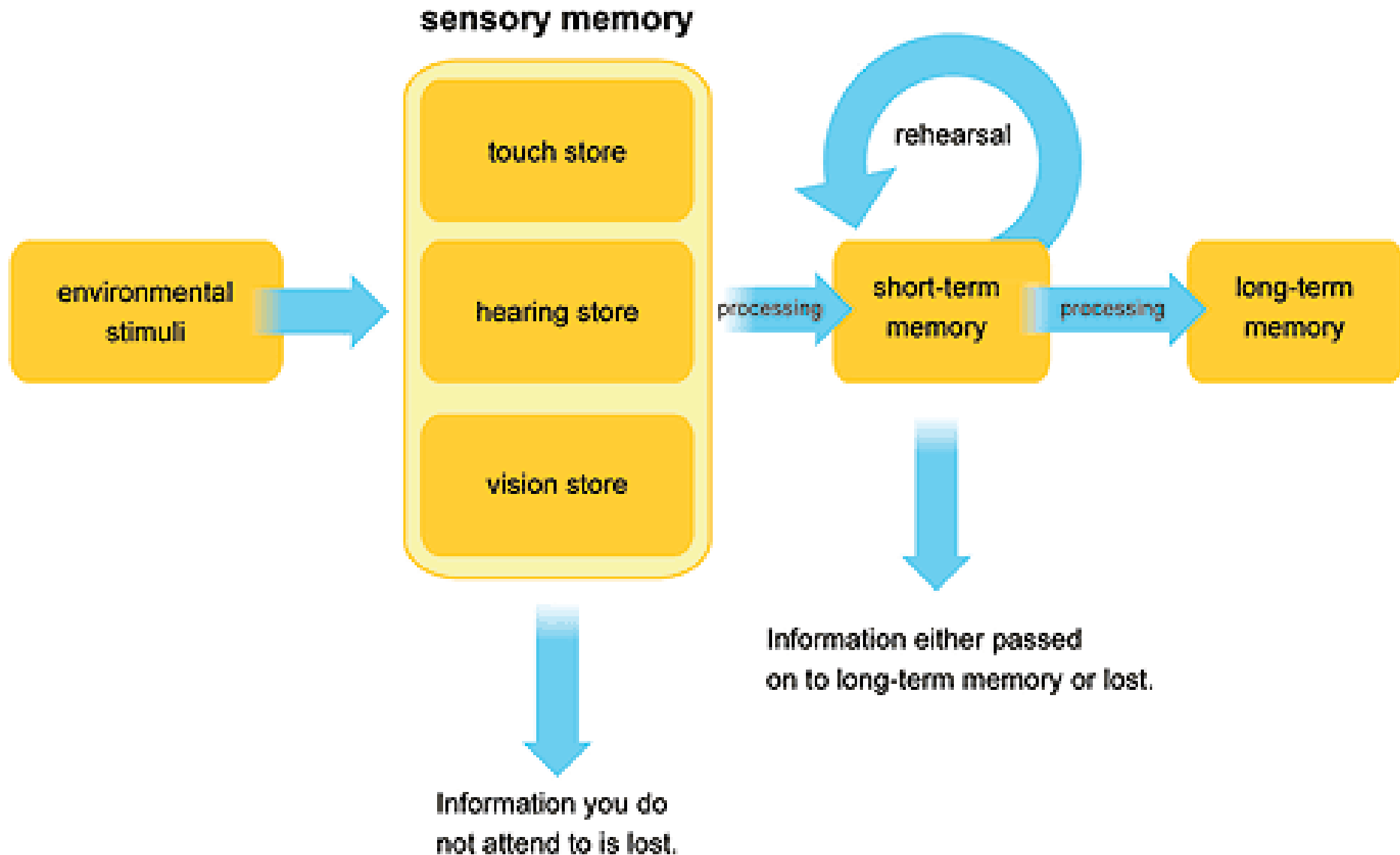
Capacity:
Unlimited

Duration:
Unlimited



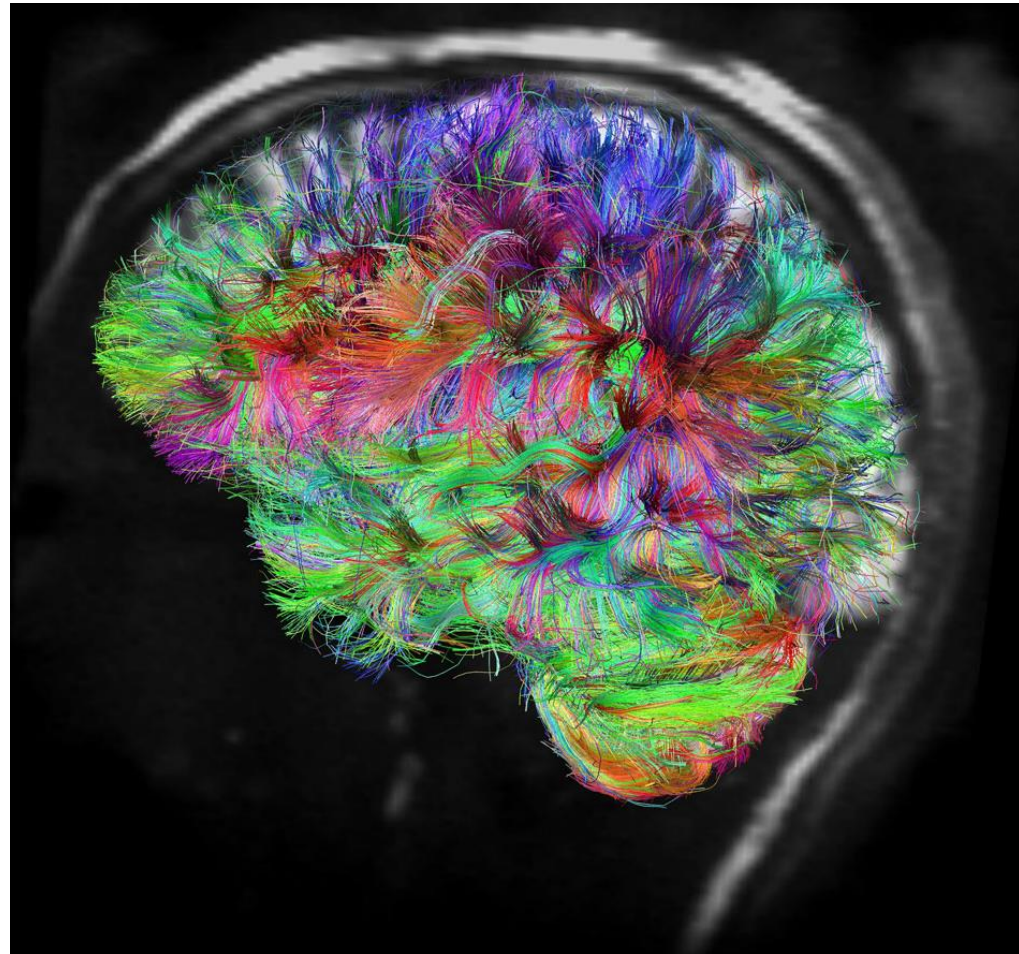
The image shows a screenshot of a NewScientist article. At the top, the 'NewScientist' logo is in a blue box, and 'Life' is written in large black letters. Below the logo is a navigation bar with links for Home, News, In-Depth Articles, Opinion, CultureLab, Galleries, and Topic C. A secondary navigation bar contains categories: SPACE, TECH, ENVIRONMENT, HEALTH, LIFE (highlighted in yellow), and PHYSICS&M. Below this, there are breadcrumb links: Home | Life | News. The article title is 'Why your brain has a 'Jennifer Aniston cell'' in bold black text. Below the title is the publication time '19:00 22 June 2005' and the author 'Anna Gosline'. The main text of the article begins with 'Obsessed with reruns of the TV sitcom Friends? Well then you probably have at least one "Jennifer Aniston cell" in your brain, suggests research on the activity patterns of single neurons in memory-linked areas of the brain. The results point to a decades-old and dismissed theory tying single neurons to individual concepts and could help neuroscientists understand the elusive human memory.'

The 'multi-store' model for memory



The link with Growth Mindset

- Your brain develops most (neural pathways) when you struggle
 - Learning is hard
 - Mistakes are good
- These pathways then need to be **strengthened**
 - **Repetition** – like training for a marathon
 - Strong stimuli also help: **use rewards** when revising



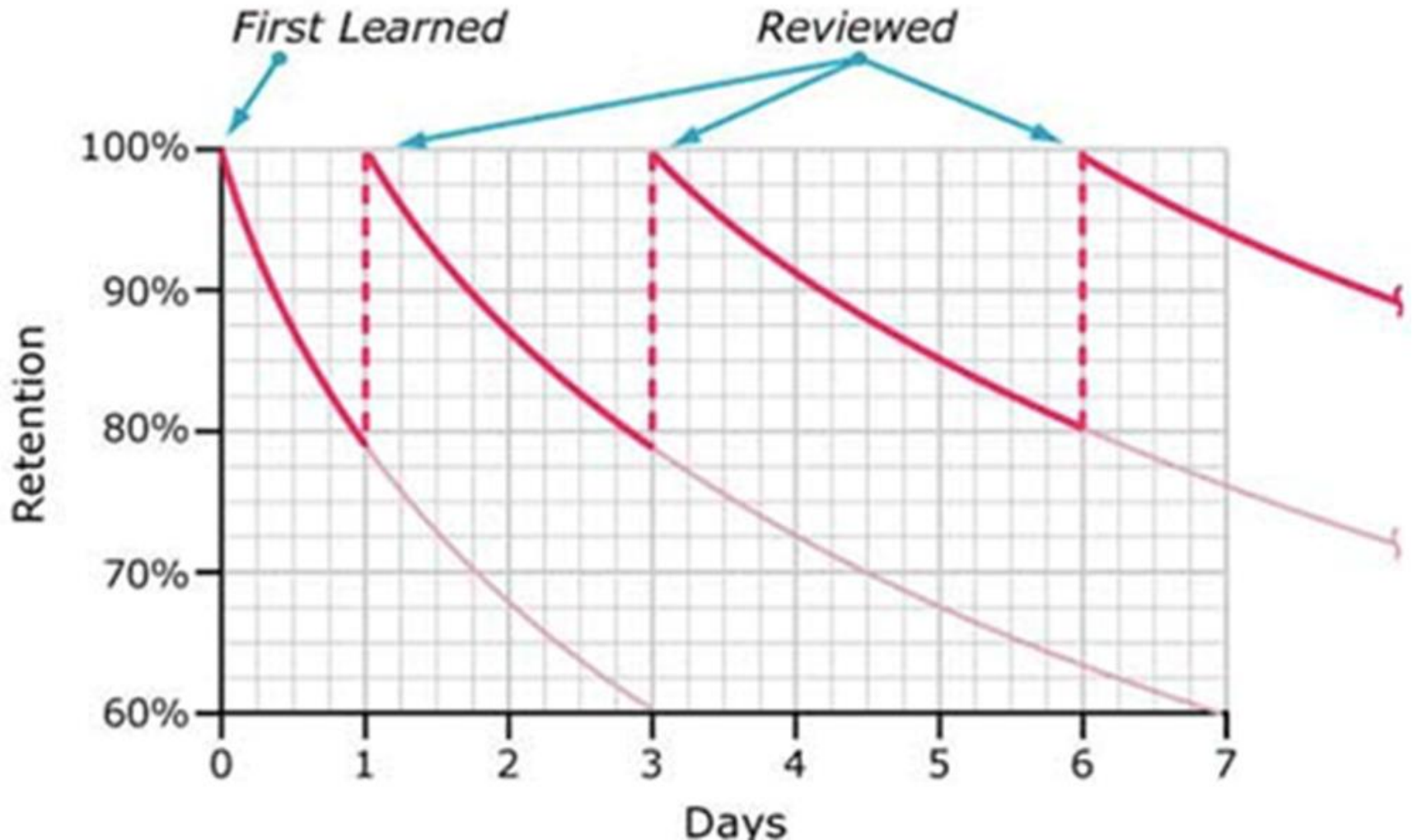
Memorization techniques

- ‘Chunking’ techniques:
 - 1st letter Mnemonics
 - Converting words into images or diagrams
 - Concept mapping
 - The Journey Technique

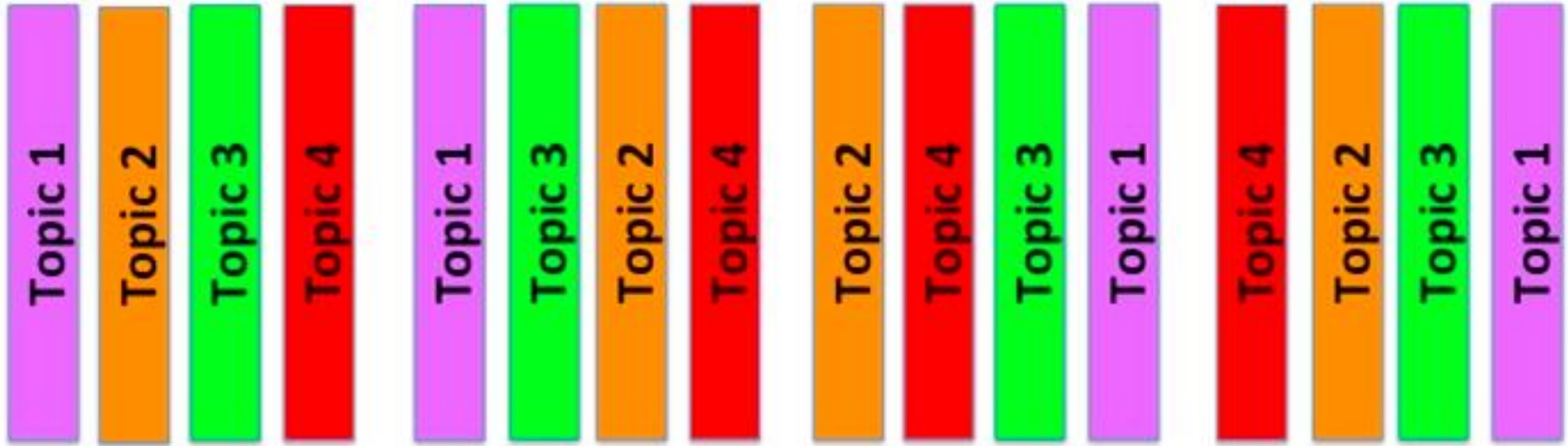


The 'Forgetting Curve'

Typical Forgetting Curve for Newly Learned Information



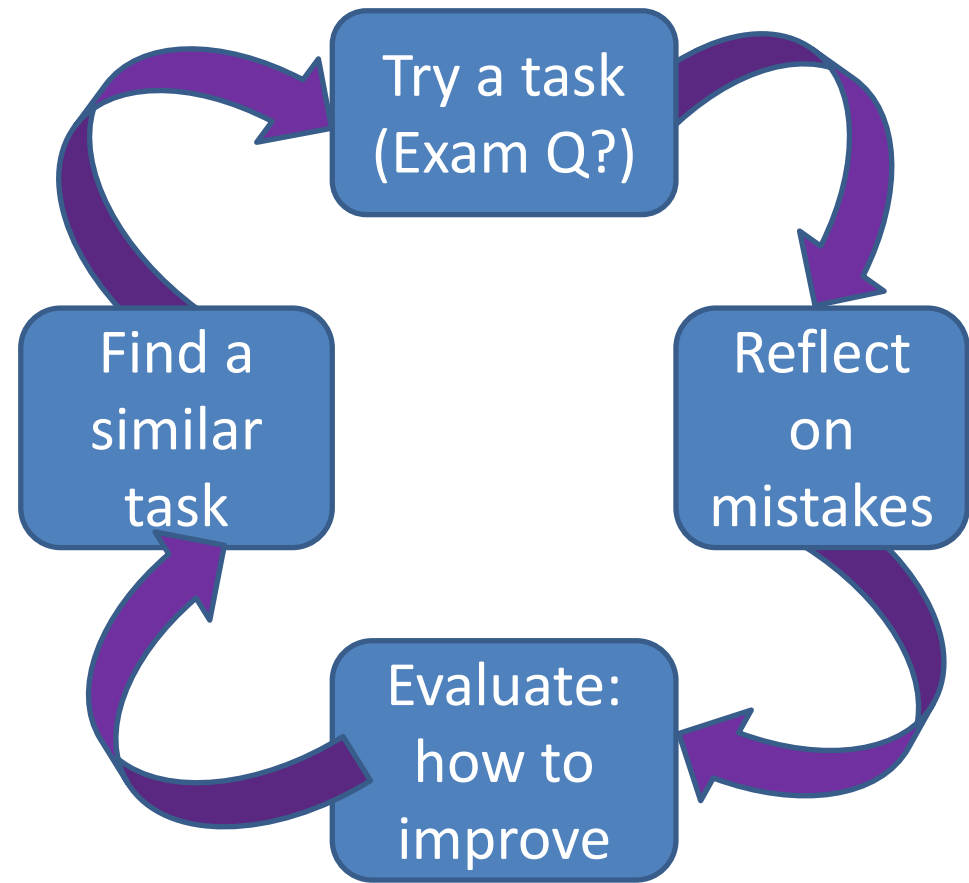
Defeating the 'Forgetting Curve'



- **Space out & repeat** revision of each topic
- **Repeatedly test** yourself
- **Evaluate your mistakes** each time
- **Vary revision techniques:** writing, speaking, listening
- **Plan rewards into your revision:** breaks, fun, food

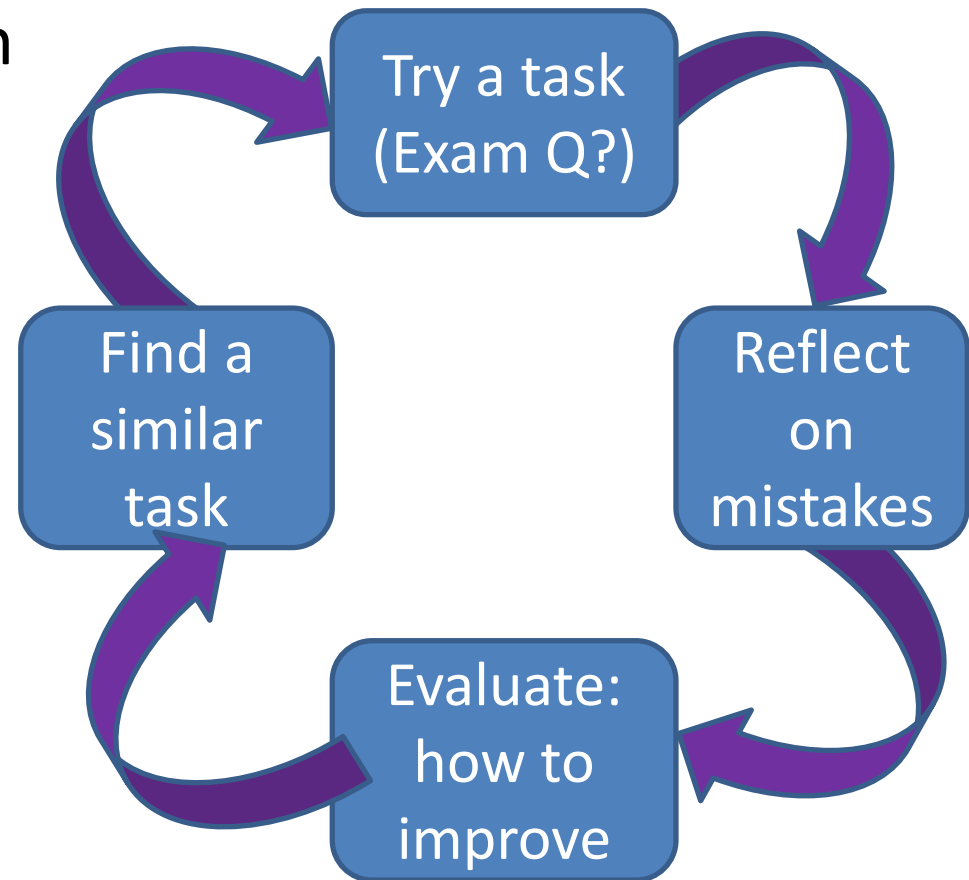
Metacognition when revising

- **Metacognition:** ‘Thinking about thinking’ aka ‘Learning to learn’;
- **Reflect:**
 - Why did I choose that answer?
 - What was faulty about my answer?
 - What information was I missing?



Metacognition when revising

- **Evaluate:**
 - What should I have been thinking about for this Q?
 - What would I do differently next time?
 - What do I need to go over again before trying a similar Q?



- **What resources do you need to follow this process?**