RETRIEVAL PRACTICE IDEAS

TO SUPPORT WITH HOMEWORK

COURTWOOD PRIMARY SCHOOL

A GUIDE FOR PARENTS

The activities and techniques within this presentation are some of the ways in which retrieval practice can be used to support children to know more and remember more.

Using these activities will help your child to strengthen their memory and recall information from their learning, leading to deeper learning and understanding.

Homework activities will make reference to some of these techniques. The following slides explain how each one works and can be used to help your child with their homework and their learning to be successful at school.
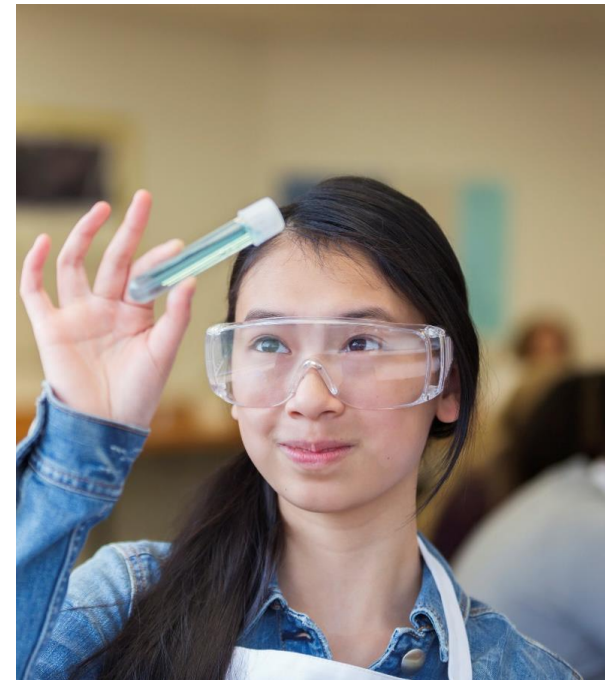
RETRIEVAL PRACTICE PROMOTES:

Children knowing more and remembering more

Effortful thinking or 'desirable difficulty'

Good progress and independent learners

The Principles of Retrieval Practice

- Retrieval supports children to move learning from their short-term to long-term memory.

- Being able to 'find' the information we need, when we need it, is the basis of retrieval practice (it has been taught it but has it been learned?)

- Retrieval practice needs to be regular but not overly-repetitive in method.

- Retrieval practice is a learning tool, not a testing tool.

- Retrieval should be effortful and children should struggle a little to remember – this helps strengthen memory.

- Retrieval is most effective if it is spaced (self-quiz learning from yesterday's lesson, last week's lesson, last month's lesson).

- Retrieval should be low-stakes (children self-quiz, correct, mark their own quizzes).

RETRIEVAL STRATEGIES

How to Use: Picture Prompt

Show your child a photo/illustration/map/portrait/diagram.

Ask them to retrieve information learned linked to the image (this comes from their prior learning).

The image provides some scaffolding but the key is ensuring children **retrieve relevant information** and **not begin describing** what they can see in the picture.

Explicit modelling of the difference between describing what can be seen in the picture and retrieving information linked to the prompt, may be needed initially and with younger children.

Task: Explain how each image is connected to Pop Art. Explain in your own words, from memory.

RETRIEVAL STRATEGIES

There are **lots of versions** of retrieval grids, that combine **retrieval** and **spaced practice**

This task identifies gaps in knowledge and children may decide in advance which factor they want to focus on for the next session

How to Use: Retrieval Grids

The grid can contain as many boxes as you think suitable but should equate to one per week over a half term.

Each box contains a part of the topic already studied – no new material. The box could refer to a concept, event, individual, key term or date.

At the start of the session, your child picks one of the boxes and writes as much from memory about that chosen category.

The following week the same grid is on display. Children pick a different box to answer. They cannot repeat a box and every week a new box must be selected and be the focus of the recall. Eventually children will have recalled information about every category in the grid.

This is great for seeing where children lack confidence/knowledge by leaving those boxes until last!

Task: Each lesson you must select a box and write down as much as you can remember from memory about that category. You cannot refer to a box more than once.

Andy Warhol	1950s Britain	Roy Lichtenstein

Artistic techniques used in Pop Art	Celebrity	The Pop Art Movement

RETRIEVAL STRATEGIES

Use one question per flashcard to make it explicitly clear where the gaps in knowledge are

How to Use: Flashcards

Children create flashcards with questions on one side and answers on the other – this promotes self or pair testing (with someone at home) to ensure active recall.

Answers provide instant feedback and guidance, and informs the child where the gaps in their knowledge are they need to return to and focus on.

Important children consciously recall the answer verbally or written, before turning the card over (otherwise they may think they know but actually just recognised the answer rather than retrieved it).

Top Tips:
- Parents can get involved by reading the questions and checking the answers
- Ensure children shuffle their cards when using them, so they don't recall information in a specific sequence
- Combine flashcards with spaced practice – over a period rather than cramming
- **Create the flashcards using the Knowledge Organiser!**

Flashcards with the Leitner System

The focus of this system is to help children revisit the cards they have previously struggled with, until they can retrieve the information with ease and confidence.

Main method involves using three boxes/trays/plastic wallets/envelopes.

Monday – pupils self-quiz and if they answer correctly or incorrectly, this determines which box the flashcard goes to.

| Box 1 Every day – all cards start here. Incorrect cards stay here so they are practiced daily. Correctly answered cards go into Box 2 | Box 2 Tues & Thu – cards answered correctly go here, so there is still some spaced practice. If a card from here is answered incorrectly it goes back into box 1. | Box 3 Friday - Questions that have been correctly answered from box 2, go in here, only to be revisited on Friday. |

RETRIEVAL STRATEGIES

How to Use: Retrieval Clocks

Children get 5 minutes (or less for younger year groups) to write as much as they can from memory about one of the sections.

After 5 minutes, move them onto another section. Repeat until all the sections are filled in.

This technique is good for retrieval and identifying strengths and weaknesses, in individual children's knowledge.

Good for children who struggle to organise their time.

A parent can choose the headings or older pupils could have less 'prompting' and come up with their own.

Supports spaced practice as headings used can be from material learned longer ago.
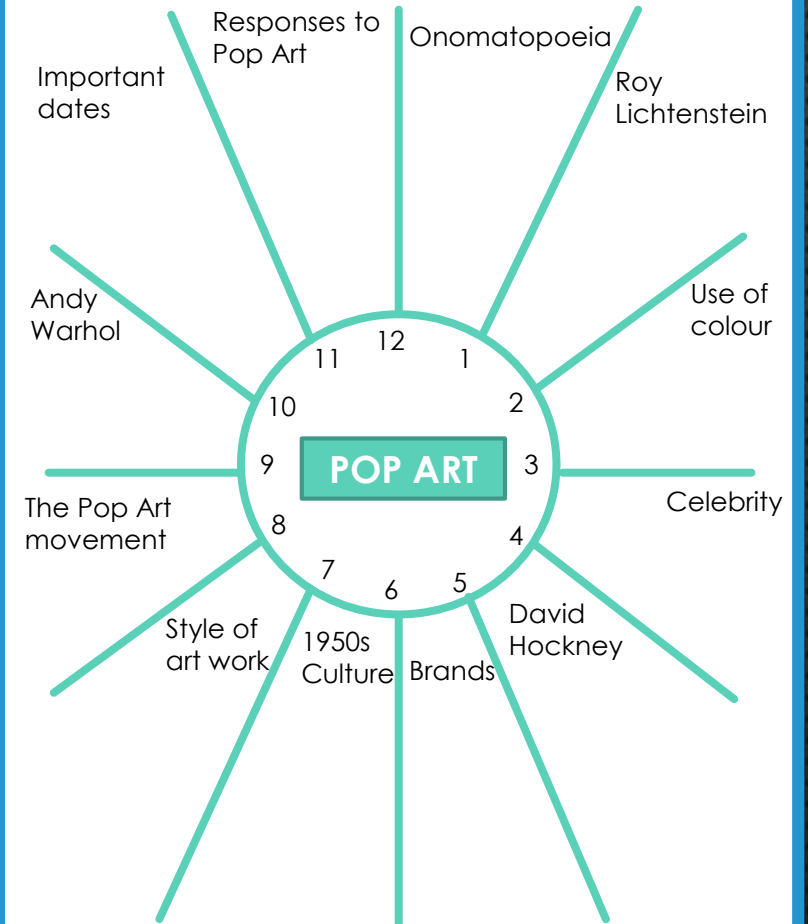
RETRIEVAL STRATEGIES

How to Use: Cops and Robbers

In the 'cops' column, children write as much as they can from memory about a specific topic in a set amount of time (4 – 5 minutes should be enough).

Then they complete the 'robbers' section – children re-read their knowledge organiser/watch an online video etc, seeing ideas and information they either forgot or didn't have time to include.

They then add this information to the 'robbers' column.

The task focuses on recall.

For older children, you could use this without the 'Factors' listed – by providing them with headings you are effectively scaffolding their retrieval which means they have to 'struggle' less.

Factor	Your own knowledge and recall...	Information you have 'stolen' from your peers...
Andy Warhol		
1950s		
Popular Culture		
Celebrity		
Use of colour		

RETRIEVAL STRATEGIES

'Desirable Difficulties':
Consider **gaming:** the *challenge increases* as you play. Requiring *more effort* and being *more rewarding* when completed

How to Use: Challenge Grids

Simply a grid with a range of questions for children to generate answers to. The aim is to provide different questions that vary in the level of difficulty they pose.

The challenge is focused on the subject content. You can vary the number of boxes.

Each question is worth a certain amount of points and as the difficulty increases, so do the points.

Give children 8 – 10 minutes to answer as many questions from memory as they can – they can select which questions they answer.

Answers should be provided so children can self-check and correct.

Can be adapted to support vocabulary learning.

Name a Pop Art artist?	Which artist is famous for his comic strip art?	How did Pop Art come about?
How did Pop artists use colour?	When was Roy Lichtenstein born?	Name a celebrity Andy Warhol depicted?
How did Pop Art change British culture?	Which shape was used to create some Pop Art?	What was the name of the dots used in Pop Art?

1 point	2 points	3 points

Vocabulary Challenge Grid

1. painting	4. exhibit	7. critic
2. Pop(ular)	5. Complimentary colours	8. culture
3. artist	6. onomatopoeia	9. society

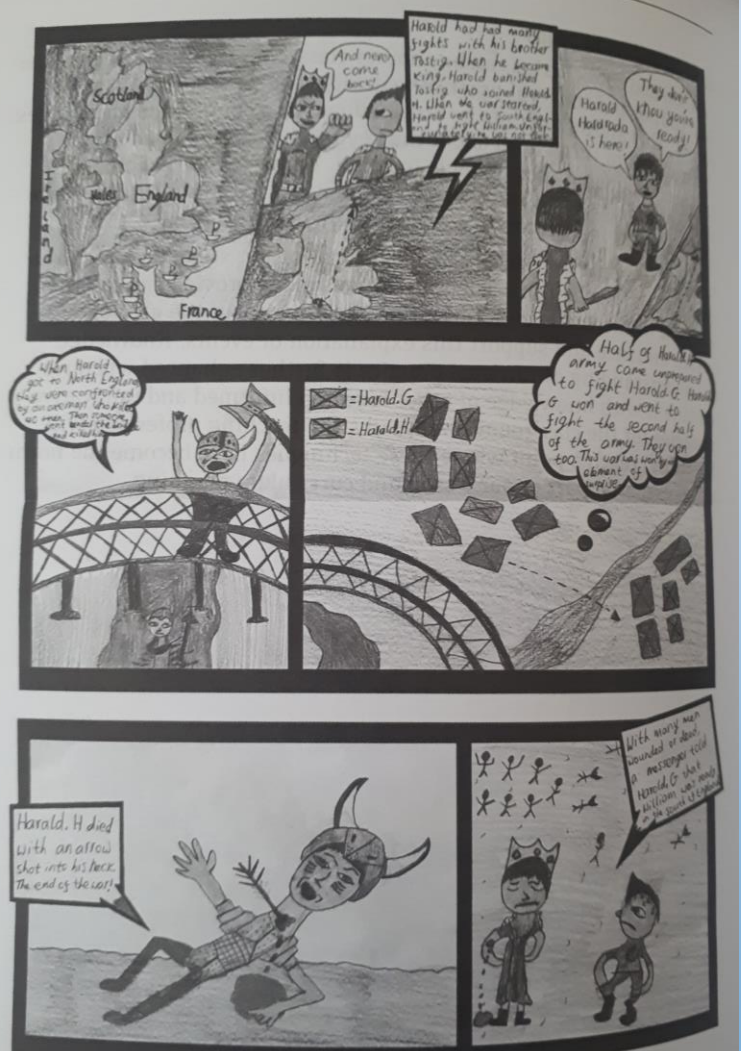| 1 point	2 points	3 points

RETRIEVAL STRATEGIES

Dual Coding
- Combining images with text to support retrieval and memory
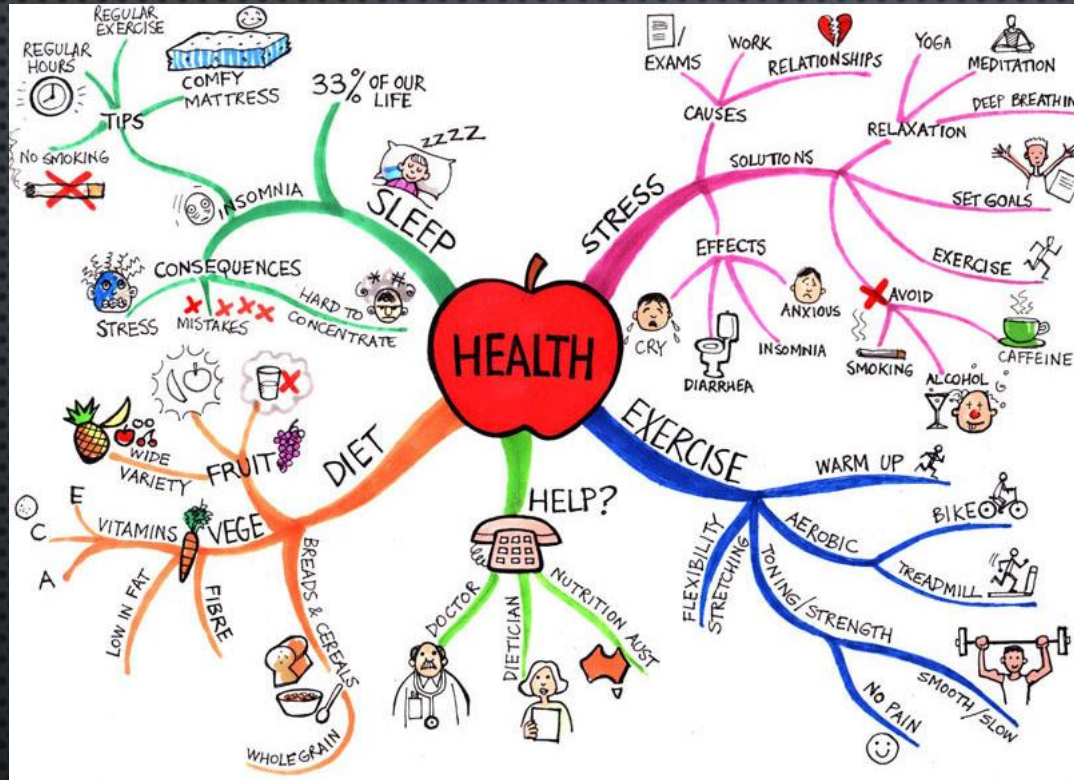
How to Use: Cartoon Strip

A technique to combine retrieval practice and dual coding to demonstrate a sequence, story or events.

Allows topics to be broken into chunks and encourages children to think hard about the key facts or points to include.

Illustrations alone can provide an accurate overview of events but captions can further enhance and support explanations.

RETRIEVAL STRATEGIES

RETRIEVAL STRATEGIES

You could give children a blank template and ask them to create their own retrieval practice game at home

How to Use: Snakes and Ladders

A classic game easily adapted for retrieval practice. An adult will need to play with the child.

You will need dice!

This was originally created drawing on Bloom's Taxonomy (using the 'name'/'describe'/'explain'/'compare'/ 'suggest' prompts) to promote higher order thinking – see top example.

It can be adapted by using questions which focus on retrieval and spaced practice.

As the game progresses, the level of challenge can increase, with questions focused on content studied further back. The start of the game focuses on content studied more recently.

Play for 8 – 10 minutes and after discuss answers, checking any you were unsure of.

Board 1

Finish	Suggest… why Pop Art still remains popular today	Compare… popular culture today to the 1950s	Compare… the work of David Hockney and Warhol
Explain… what Pop Art is to someone	Explain… how contrasting colours work	Explain… why the Pop Art movement started	Explain… how colour was used in Pop Art
Describe… the colours used in the print 'Marilyn'	Describe… what life was like in the UK in the 1950s	Describe… the work of Roy Lichtenstein	Describe… how artists used dots in Pop Art
Start	Name… three Pop artists	Name… a celebrity depicted in Pop art	Name … the year Andy Warhol died

Board 2

| Finish | Define an art movement | What does 'exhibit' mean? | Give three examples of onomatopoeic words |
What does mass produced mean?	Which two countries did Pop Art emerge in?	How do you print using a silkscreen?	Whose work was inspired by cartoon strips?
How many films did Warhol produce approximately?	How did Warhol change the portraits he repeated?	What did Andy Warhol study at University?	Who taught Andy Warhol to draw?
Start	When was Andy Warhol born?	What year did Andy Warhol die?	Where did he grow up?

RETRIEVAL STRATEGIES

How to Use: Timelines

Timelines are especially useful and work well for subjects where children need to retrieve chronology-based knowledge, such as history. Can also work well in English, illustrating the chronological order of events of a plot.

Children could:
- Recall from memory a timeline of events
- Recall events but with start and end key dates on the timeline
- Add information to key dates that are already annotated on the timeline
- KS1 classes could use a sorting task where pupils put events in the correct chronological order

Dual coding works well with timelines as pupils can draw images to represent key events or individuals and combine the images with text and/or dates.

Andy Warhol Timeline

1928

1936

1942

1946

1950s

1987
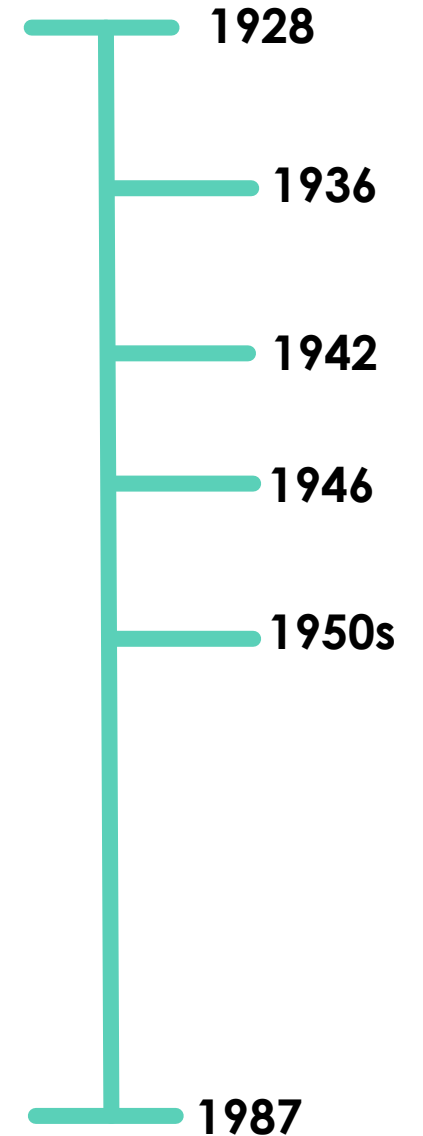
RETRIEVAL STRATEGIES

How to Use: Thinking and Linking Grid

Can be used to make connections and explore links and themes within a topic. It requires children to have an overview of a topic in order to make the connections using their subject knowledge and understanding.

Give children a grid (usually 6 x 6 because of the dice) and get them to roll a dice to get coordinates vertically and horizontally for their first box.

In the box is a keyword or image.

Roll again to select a second box.

Children make links between the words or images they have randomly selected with the dice.

This technique gives pupils the opportunity to establish deep connections, although if a connection cannot be made without it being tenuous, it should be avoided.

	1	2	3	4	5	6
1	Andy Warhol	gallery	colour	The elite	competitive	portraits
2	scale	Comic books	Campbell's soup	advertising	Marilyn Monroe	fun
3	celebrity	glamour	World-wide	Roy Lichtenstein	lifestyle	young
4	artist	society	Spend more	Pauline Boty	brands	Mass production
5	The UK	culture	Normal people	1940s	1950s	Richard Hamilton
6	Art as a product	David Hockney	TV, radio, internet	Ben-Day dots	The USA	plastic

Links made

Box 1	Box 2	Link between the two

RETRIEVAL STRATEGIES

How to Use: List It!

A simple free recall task.
Ask children to list as much as they can in an allotted time.

Possible suggestions for listing:
- List as many keywords as you can connected to our topic
- List as many key facts as you can linked to our topic
- List as many facts as you can about a previous topic (spaced practice)
- List as many key events or individuals we have studied
- List as many causes of X as you can
- List as many consequences of Y as you can
- List as many themes as you can

Once finished, children can swap and share lists with peers, adding information.

List It!

| Key vocabulary	Individuals	Art Works

RETRIEVAL STRATEGIES

How to Use: Diagrams/Infographics

As simple as it seems – these are great for subjects such as science, geography, maths etc which lend themselves more to diagrams and infographics to support understanding.

Simply ask children to identify and label different parts/components of the diagram.

To increase the difficulty level you could even ask children to draw the diagram itself.

Infographics combine visuals and text and can take many forms including explanatory, instructional or to summarise key information and data.
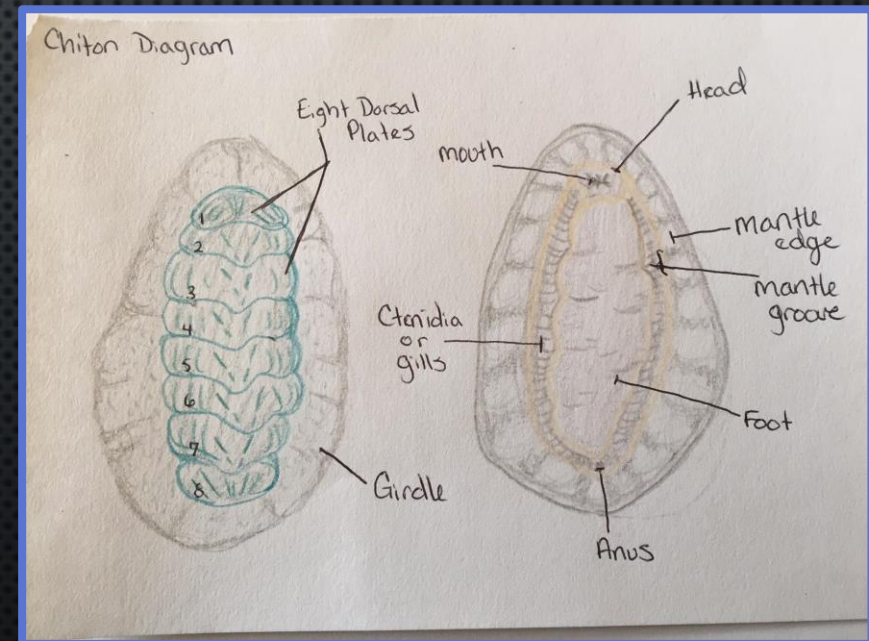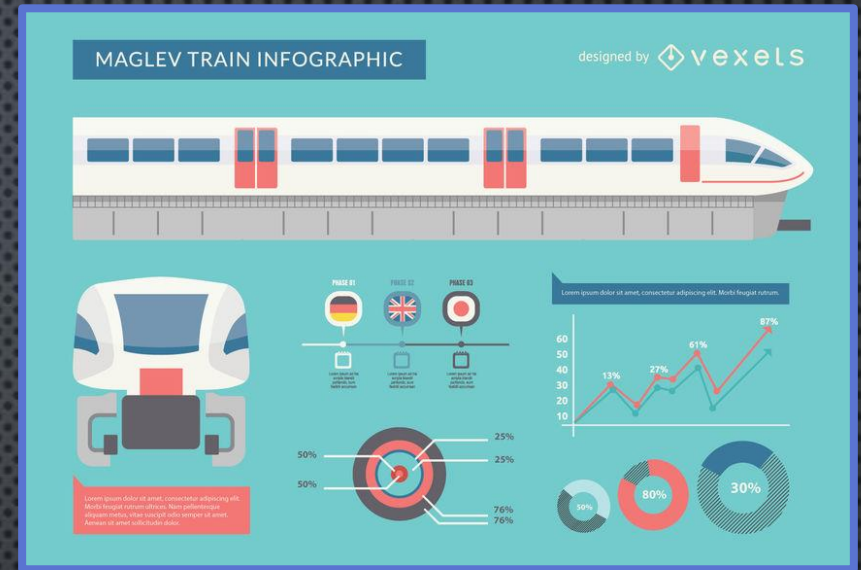
RETRIEVAL STRATEGIES

How to Use: Roadmap

Can be used to review content from a lesson or several lessons.

Road map layout lends itself well to subjects that deal with chronology or sequencing as it is very similar to a timeline but without the key dates.

Focus is to provide an overview of a topic from beginning to end, linked with spaced practice.

Give children a template with a start point and an end point, and ask them to retrieve information from memory to fill in the rest.

Some examples:
a) Key events in the life of a significant person
b) Key events from a period in history
c) Key plot features from a story

Roadmap

Finish

Start