

Retrieval Practice

S3/4 Open Evening

Introduction to Retrieval Practice

‘Retrieval is a robust, reliable, and straightforward principle derived from decades of research by cognitive psychologists.

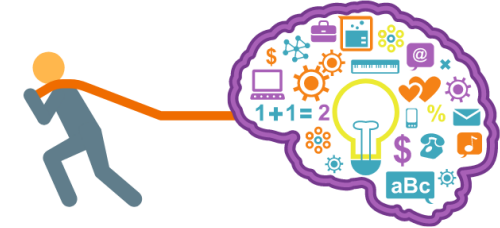
The “practice” in retrieval practice is engaging in retrieval multiple times, particularly in the context of learning.

When students **frequently retrieve** what they know – compared to re-reading a textbook chapter, for instance – long-term learning and retention of information improves’

Pooja K. Agarwal, Ph.D

- "Retrieval practice boosts learning by **pulling information out** of students' heads, rather than cramming information into students' heads.
- Retrieval practice is a **learning strategy**, not an assessment strategy."
- Retrieval practice helps students "use it or lose it," just like practicing a language or an instrument
- With retrieval practice, **struggling is a good** thing for learning ("desirable difficulty")
- Retrieval practice improves students' understanding of their own learning process ("metacognition")

RETRIEVAL PRACTICE IS PULLING INFORMATION OUT



RETRIEVAL PRACTICE IS NOT GIVING NEW INFORMATION



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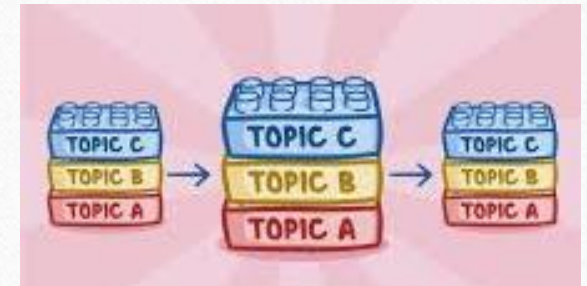
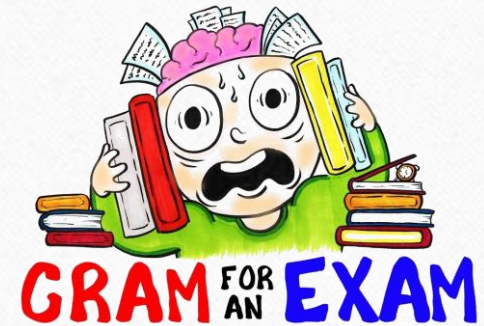
Why practice retrieval?

- Information stored in the **short term memory** is only kept for **18-30s** on average
- Retrieval practice forms a much **deeper level** of **learning** and understanding through strengthening neural pathways in the brain
- Allows pupils to experience and become **used to the feeling of making mistakes** and uncovering gaps in their knowledge that they should work on further
- For many pupils this **reduces their stress** in exams as with continued spacing and practice, pupils become more confident with their learning.

Spacing and Interleaving

Two of the most important parts of retrieval practice!

- **spacing** (studying small chunks, regularly i.e not cramming (surprise, surprise!))
- **interleaving** (taking lots of different topics and retrieving the information together)

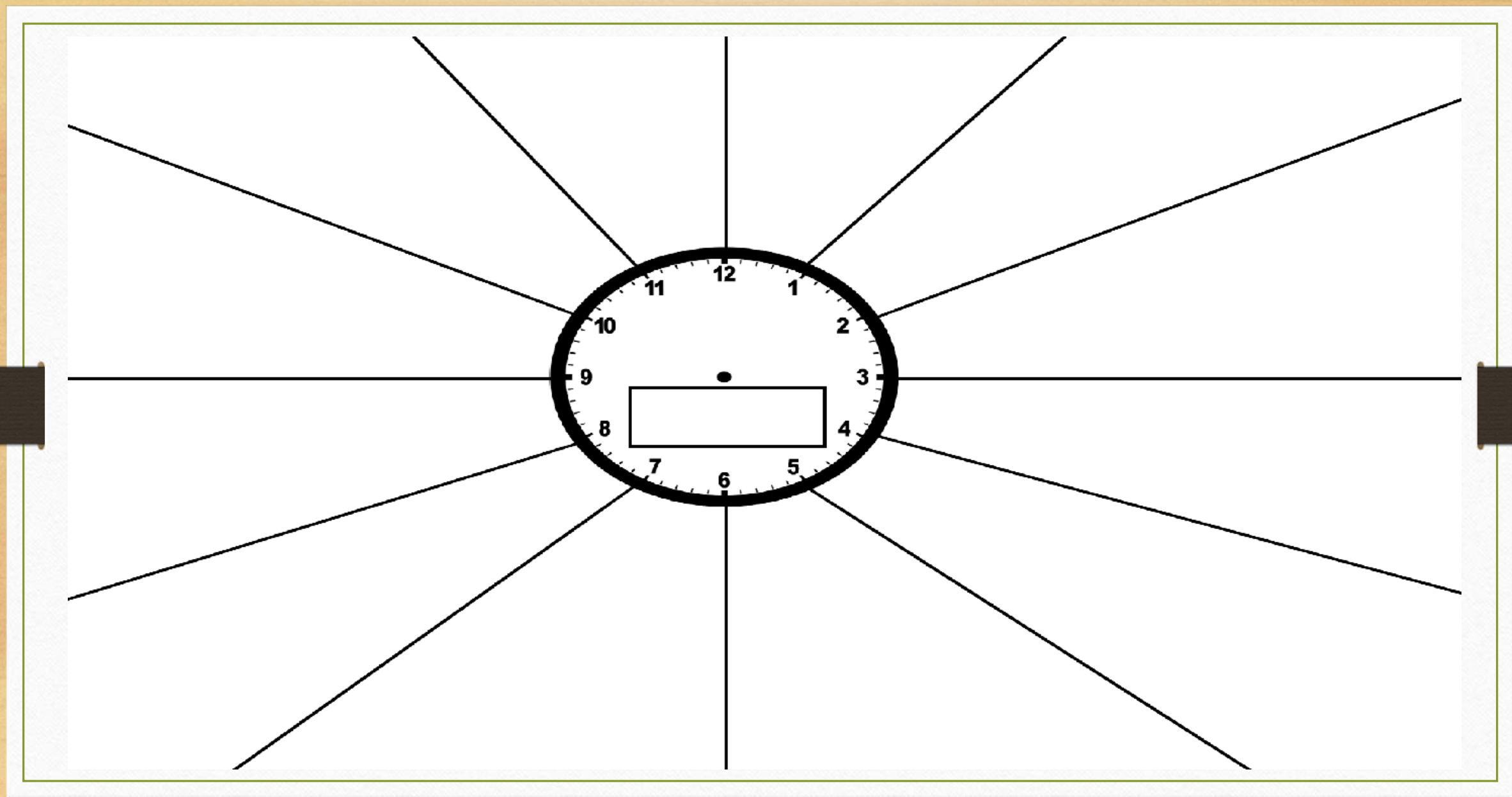


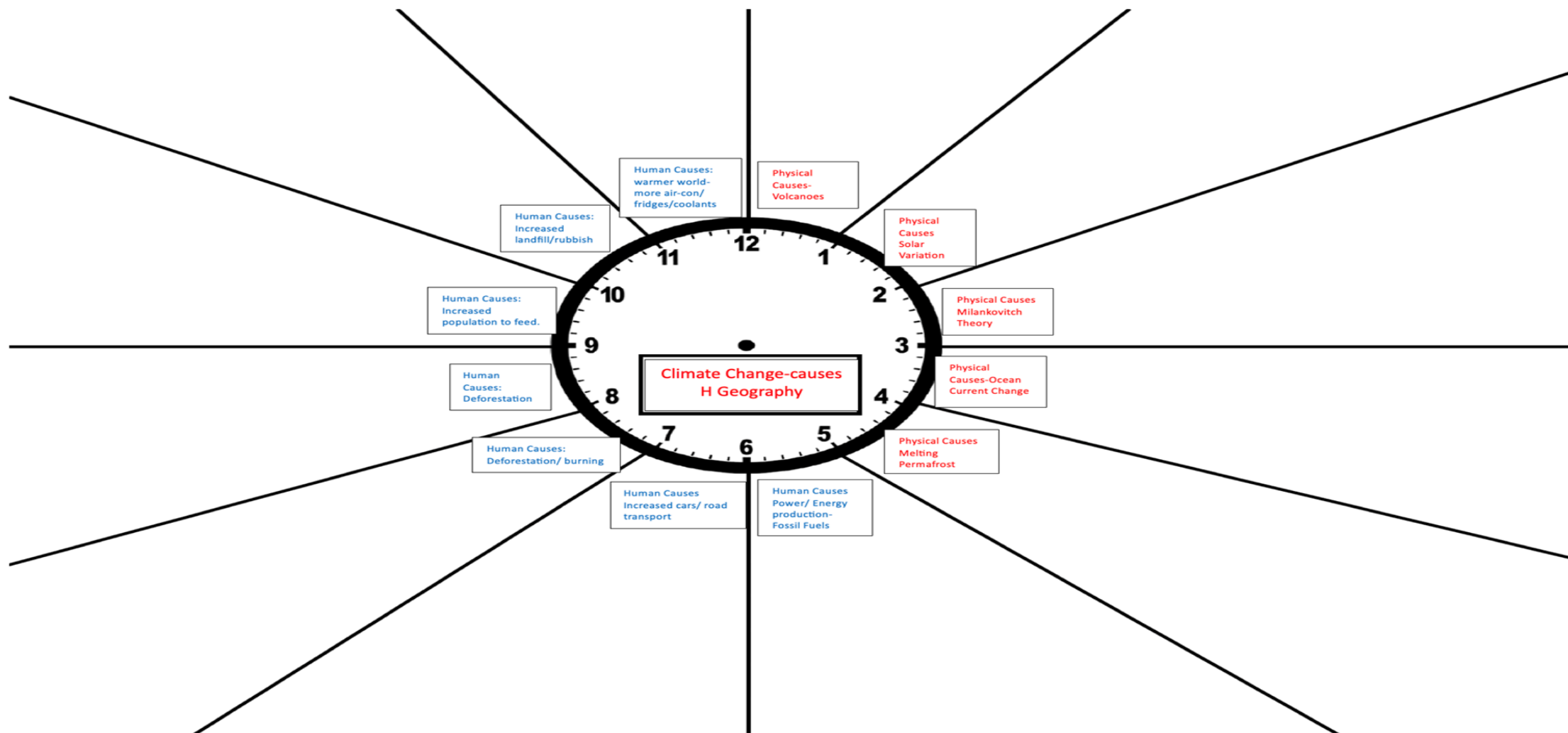
Revision Clock

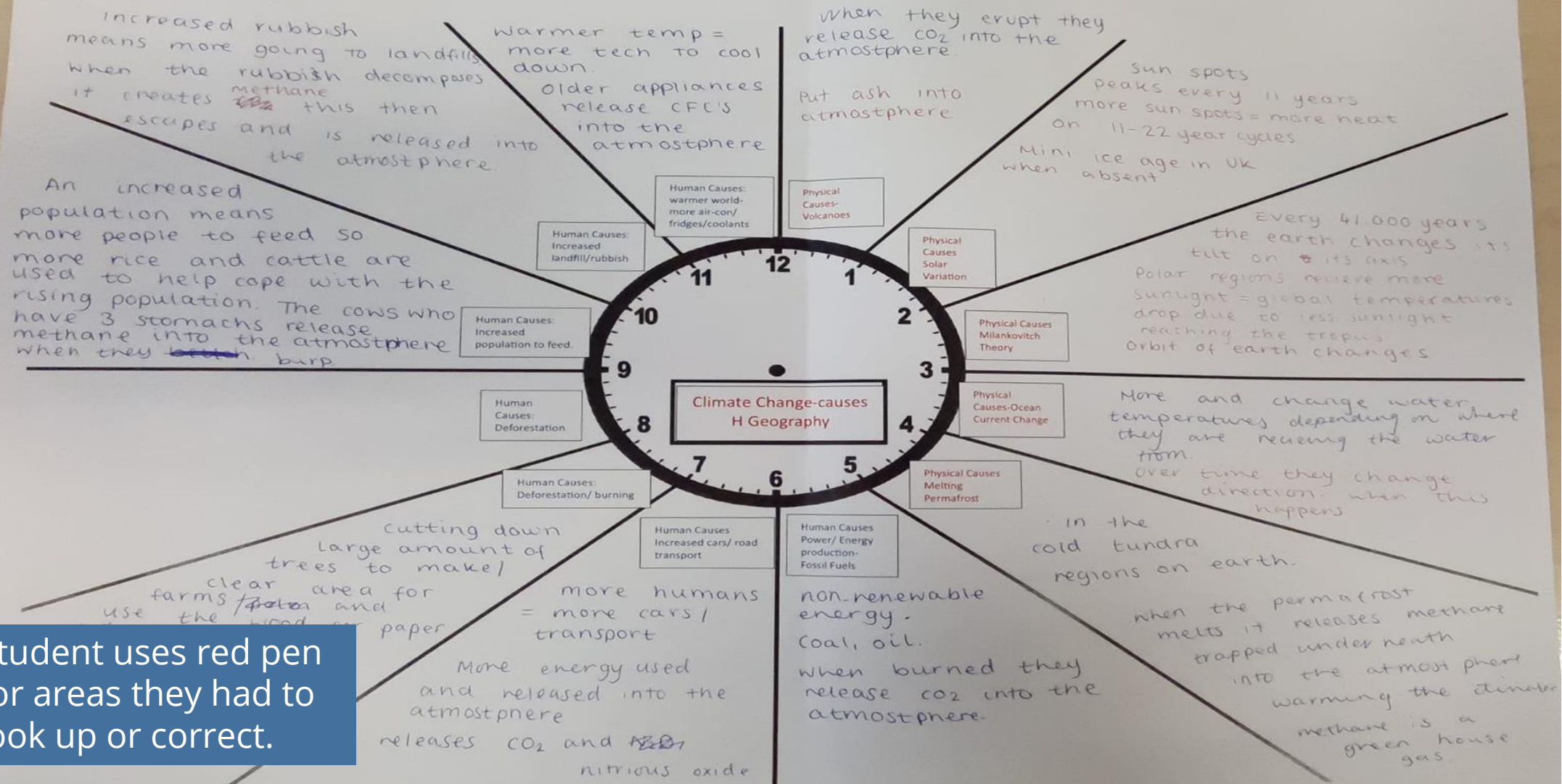
Revision Clock Technique

Revision clock

- Split paper into 12 segments, like a clock face.
- Write down the different questions or subtopics that you can be asked about as part of this unit of work.
- Take two colours of pens. Using your first pen, spend 4 minutes (or any time you wish) completing each segment of your clock from memory.
- Check your notes and then take your **second colour of pen**. Add in any additional information you missed first time round. focus on what you didn't know.
- Combine this activity with images.
- Maintain focus at home by setting phone timers.







Student uses red pen for areas they had to look up or correct.

Picture Prompts

Retrieval Practice - Picture Prompt

Instructions

Each icon and image will be a prompt for the students to write or type what they can remember from memory.

This task supports students to be more specific with their recall knowledge.

The below sheet can be altered with subject specific icons.

Exemplars

Motives for going on a Crusade (History)

PESTEC Analysis (Business Management)

ESSAY (1) MOTIVES FOR GOING ON CRUSADE

RELIGION



ESSAY (1) MOTIVES FOR GOING ON CRUSADE

RELIGION



Remission of sins offered by pope Urban II. Those who sinned would be forgiven if they went on crusade.

Raymond of Toulouse was very religious. He sold all his land to go on crusade and wanted to die in holy land.



SEEKING FAME AND RICHES

Great Barons went to get estates. Younger sons of noble families went to gain land as they were disadvantaged by law of primogeniture.

Bohemond of Taranto joined to get territory as he didn't gain any from his father. Showed little interest after gaining land.



PEER PRESSURE

If a knight came from a family of high status it would be unacceptable for them to not join.

Stephen of Blois married into a very religious and powerful family. Pressured to fulfil his duty and fight.



OVERPOPULATION AND FAMINE

Growing crops was difficult due to overpopulation increasing conflict and food shortages. - lower class.

Disease from eating bread made from mouldy rye. - ergotism.



SEEKING ADVENTURE

Peasants had little benefits or any chance to negotiate pay or working conditions.

Go to the holy land to escape their mundane life.

National 5 Business Management – External Factors



Political



Economic



Trending

Social



Technological



Environmental



Competitive



National 5 Business Management – External Factors



Political

new legislation



Economic

inflation and unemployment



Trending

Social

changes in taste and fashion or the increase in spending power of one group, for example, older people



Technological

For example, being able to sell goods online or using automation in factories



Environmental

weather conditions affecting sales or production and growing interest in being 'green', for example by recycling



Competitive

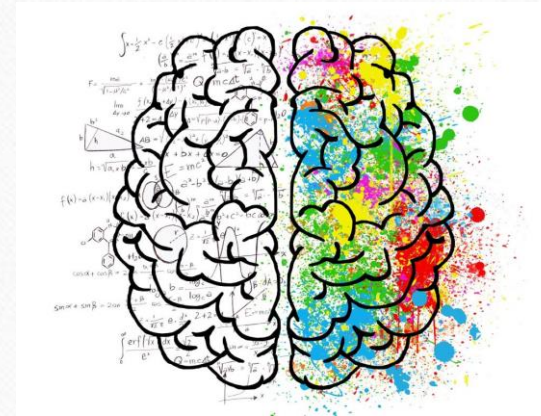
Impact of a rival firm which may have a similar product or which may lower its prices

Brain Dump



A brain dump is very simply when you write down everything you can remember about a topic in a given length of time.

This can be a short activity lasting as little as 5 minutes and is a chance for learners to **show what they know**.



Write everything you can remember about....



BRAIN
DUMP

Now it's your turn....

- You will each be give a brain dump template.
- You will have 2 minutes to write down everything you know about the TV program Friends

F•R•I•E•N•D•S



Write everything you can remember about....

How
you
doin'?

London
baby...

Friends is an American television sitcom created by David Crane and Marta Kauffman,

which aired on NBC from September 22, 1994, to May 6, 2004, lasting ten seasons.

With an ensemble cast starring Jennifer Aniston, Courteney Cox, Lisa Kudrow, Matt LeBlanc, Matthew Perry and David Schwimmer,

the show revolves around six friends in their 20s and 30s who live in Manhattan, New York City. The original executive producers were Kevin S. Bright, Kauffman, and Crane.

The one
with the..

Agarwal et al, 2014 - Classroom-based programs of retrieval practice reduce middle school and high school students' test anxiety

Karpicke and Blunt, 2011 – Retrieval Practice Produces More Learning than Elaborative Studying with Concept Mapping

Kate Jones (Twitter, online CPD courses and she has written a few books on RP)