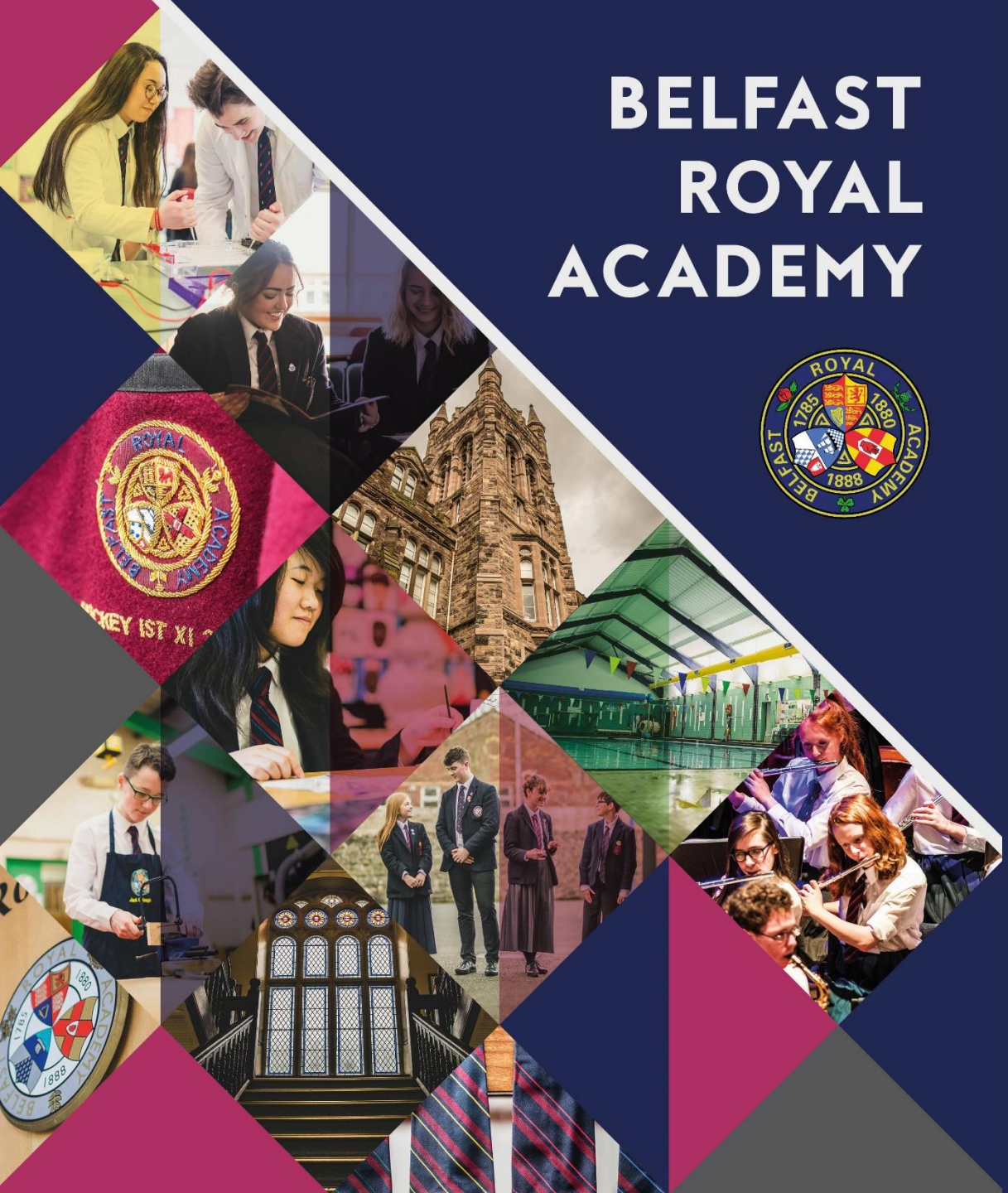


BELFAST ROYAL ACADEMY

Parents' Guide

How to Revise

How can you help your child and prepare them to perform?

1. Being a role model
2. Help them set goals
3. Keep them active
4. Healthy eating
5. Time out
6. Sleep patterns
7. Unplugging
8. Staying cool & calm
9. Belief
10. Be supportive

Each day you can support your child to make choices which can impact how they perform during the exam period

Effective Revision Strategies

- At this stage, it is about having
  - The right attitude
  - Making the effort
  - Using effective systems

Most pupils need support to revise effectively

No surprises…

Pupils should know:

WHAT they need to learn

WHEN they will be assessed

HOW to learn / revise it

HOW to test themselves

WHERE to go for help

We need to model revision

Pupils feel that re-reading of notes and maybe highlighting some is sufficient.

NOT AN EFFECTIVE USE OF TIME

PHASE 1: READ

- *Revision workbook*
- *Own notes*
- *Text book refresher*
- *Relevant websites e.g. quizlet*

What do most students do?

PASSIVE REVISION

EXAM

- *Hope knowledge has stuck enough to answer an exam question and be successful*

PHASE 2: POSSIBLY MAKE REVISION NOTES

- *Flashcards*
- *Revision book*
- *Mind maps*
- *Graphic organisers*

PHASE 4 RAG KNOWLEDGE

- *Red – no knowledge – learn again – maybe try a different technique*
- *Amber – good factual knowledge but can't apply to an exam question*
- *Green – can answer exam questions on this topic confidently*

NOW FOCUS ON YOUR RED TOPICS - BE EFFECTIVE AND TARGET REVISION

PHASE 1: READ

- *Revision workbook*
- *Own notes*
- *Relevant websites e.g. Quizlet*

ACTIVE REVISION CYCLE

PHASE 2: MAKE REVISION NOTES - LEARN CONTENT

- *Quizlet*
- *Flashcards*
- *Revision book*
- *Mind maps*
- *Graphic organisers*
- *Mnemonics*
- *Post it note revision*
- *Read, cover, write, check*

PHASE 3: TEST YOURSELF

- *Exam Practice – short / long answer questions*
- *Quiz yourself (flash cards / quizlet – other online quizzes)*
- *Teach someone else*

“ When it comes to retaining information, not all methods are created equal.”

ALEX QUIGLEY ‘TOTAL RECALL’

Research: Dunlosky et al (2013)

- Embarked upon an assessment of 10 commonly used teaching and learning/revision techniques.

- Amongst other factors, researchers were aiming to understanding the **UTILITY** of the techniques, the **EFFICACY** and the **RANGE OF LEARNERS** the 10 techniques could be used for.

Outcomes

TOP 3 PRACTICES

1. **Practise testing**
2. **Distributed practice (the opposite of cramming – spread revision throughout the course)**
3. **Interleaved practice (mixing different kinds of material within a study session)**
4. Elaborative interrogation (*explaining why a fact / concept is correct)*
5. Self-explanation (*explaining how information is connected*)
6. Summarising – *but successful when students are shown how to summarise*
7. Imagery for text – *not applicable to a wide range of subjects*
8. Mnemonics – *but useful for short-term memory*
9. Rereading – *although it is the most commonly used*
10. Highlighting – *can actually harm student performance/ability to make inferences*

Variety is the spice of ~~life~~ revision

1. Using a range of techniques seems to be best.
2. Some of the lower rated techniques are boosted when combined with other techniques.
3. A mixture of long and short-term revision strategies are needed.
4. Students need to be introduced to a range of techniques and trial them to see what works and what doesn't.
5. Students need to **TRANSFORM their notes** into another format and **UNDERSTAND how that LINKS** to the way they will be **ASSESSED in the exam**

10 Revision ideas

1. Mindmaps
2. Flashcards
3. Foldables
4. Cornell notes
5. Revision books
6. Post-its / mind maps / posters
7. Past paper practice
8. Exam question planning
9. Graphic organisers
10. RAGing knowledge

Effort

- Effort is just habit
- Pupils who have the effort habit have created a weekly routine of repeated activities (homework or independent study)
- Pupils without the effort habit have little or no routine and respond to work as and when it hits them

How to create habit – the 3 Rs

Reminder: 4.30 p.m.

Routine: One hour and thirty minutes of activity in a quiet place, finishing at 6 p.m. broken into three sections:

- 25 minutes high intensity work with no distraction
- 5 minutes off
- 25 minutes on
- 5 minutes off
- 25 minutes on

Reward: Whatever your child chooses within reasons – a TV programme, a blast of music, a cup of tea and a biscuit

Don’t break the chain

How to use 25 minutes effectively

The Pomodoro Technique

A revision schedule

1. How many subjects?

   11

2. Which need more revision time?

   History, Mathematics, Physics

3. How many weeks until the examinations?

   2

4. What revision slots will be used?

   School day 4.30 – 6 p.m., weekends 1 – 3 p.m.

5. What days are going to be free from study?

   No work on Sunday mornings

Create a revision timetable

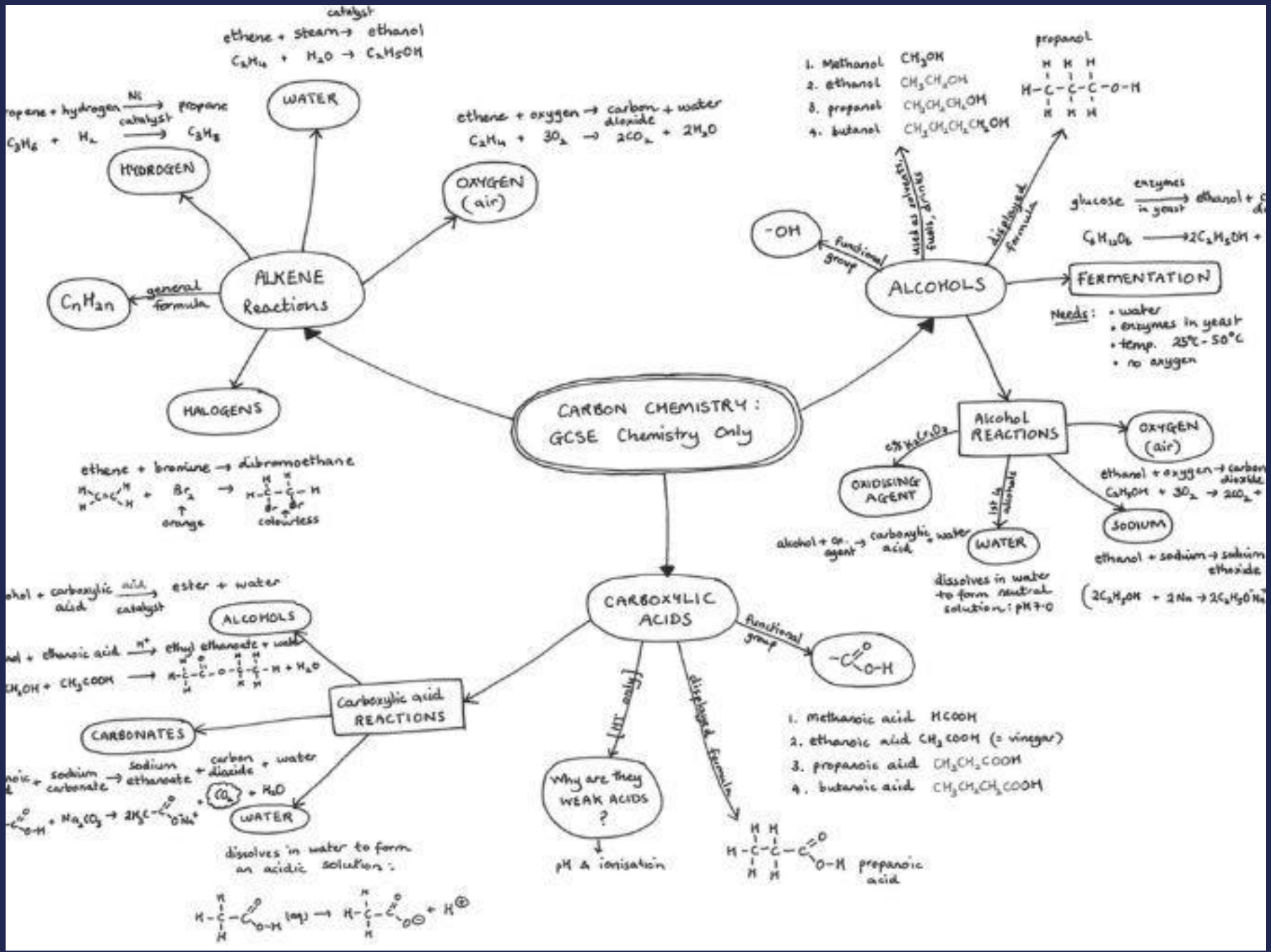
Pupils must transform their notes into a different format

Combination of:

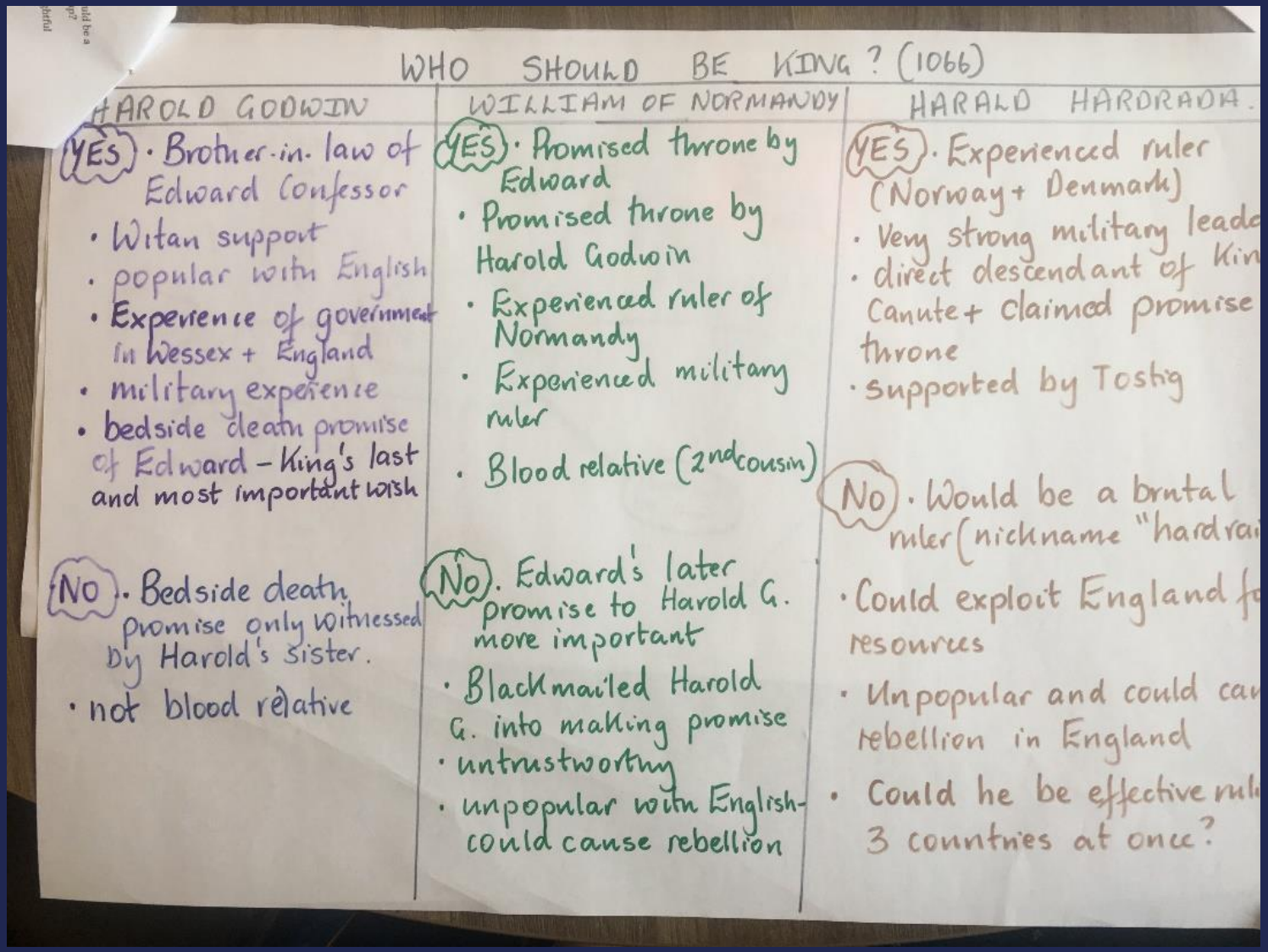
- A3 or A4 summary sheets
- Mind map
- Flash cards

Then **learn** the content

Then **test** themselves


CARBON CHEMISTRY: GCSE Chemistry Only
ALKENE Reactions
C_nH_{2n}
general formula
HYDROGEN
WATER
OXYGEN (air)
HALOGENS
ethene + steam → ethanol
$C_2H_4 + H_2O \rightarrow C_2H_5OH$
catalyst
propene + hydrogen → propane
$C_3H_6 + H_2 \rightarrow C_3H_8$
Ni catalyst
ethene + oxygen → carbon dioxide + water
$C_2H_4 + 3O_2 \rightarrow 2CO_2 + 2H_2O$
ethene + bromine → dibromoethane
orange
colourless
ALCOHOLS
-OH
functional group
displayed formula
1. Methanol CH_3OH
2. ethanol CH_3CH_2OH
3. propanol $CH_3CH_2CH_2OH$
4. butanol $CH_3CH_2CH_2CH_2OH$
propanol
FERMENTATION
glucose → ethanol + carbon dioxide
enzymes in yeast
$C_6H_{12}O_6 \rightarrow 2C_2H_5OH +$
Needs:
• water
• enzymes in yeast
• temp. 25°C - 50°C
• no oxygen
Alcohol REACTIONS
OXIDISING AGENT
OXYGEN (air)
SODIUM
WATER
1st 4 alcohols
dissolves in water to form neutral solution: pH 7.0
ethanol + oxygen → carbon dioxide + water
$C_2H_5OH + 3O_2 \rightarrow 2CO_2 +$
ethanol + sodium → sodium ethoxide
$(2C_2H_5OH + 2Na \rightarrow 2C_2H_5O^-Na^+$
CARBOXYLIC ACIDS
functional group
$-C(=O)-O-H$
1st 4 only
displayed formula
1. methanoic acid HCOOH
2. ethanoic acid CH_3COOH (= vinegar)
3. propanoic acid CH_3CH_2COOH
4. butanoic acid $CH_3CH_2CH_2COOH$
Why are they WEAK ACIDS ?
pH & ionisation
propanoic acid
Carboxylic acid REACTIONS
ALCOHOLS
CARBONATES
WATER
alcohol + carboxylic acid → ester + water
acid catalyst
ethanol + ethanoic acid → ethyl ethanoate + water
$C_2H_5OH + CH_3COOH \rightarrow CH_3COOC_2H_5 + H_2O$
sodium carbonate → sodium ethanoate + carbon dioxide + water
$2CH_3COOH + Na_2CO_3 \rightarrow 2CH_3COO^-Na^+ + CO_2 + H_2O$
dissolves in water to form an acidic solution:
$CH_3COOH(aq) \rightarrow CH_3COO^- + H^+$

History Topic – who wants to be King 1066?



WHO SHOULD BE KING? (1066)

HAROLD GODWIN

YES
- Brother-in-law of Edward Confessor
- Witan support
- popular with English
- Experience of government in Wessex + England
- military experience
- bedside death promise of Edward – King's last and most important wish

NO
- Bedside death promise only witnessed by Harold's sister.
- not blood relative

WILLIAM OF NORMANDY

YES
- Promised throne by Edward
- Promised throne by Harold Godwin
- Experienced ruler of Normandy
- Experienced military ruler
- Blood relative (2nd cousin)

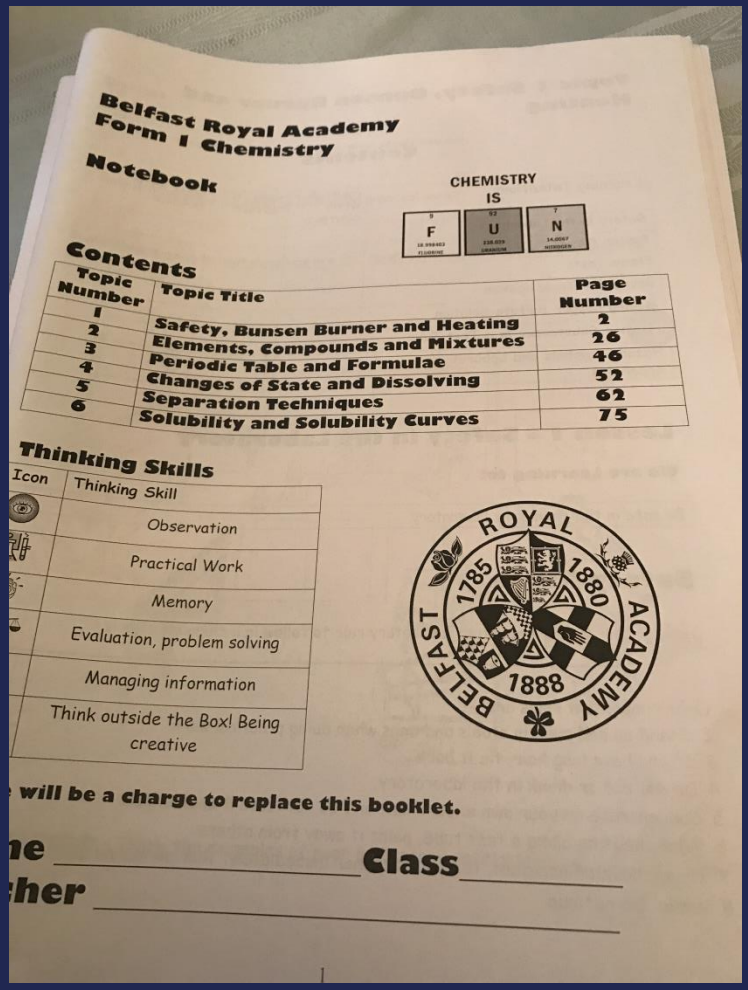
NO
- Edward's later promise to Harold G. more important
- Blackmailed Harold G. into making promise
- untrustworthy
- unpopular with English- could cause rebellion

HARALD HARDRADA

YES
- Experienced ruler (Norway + Denmark)
- Very strong military leade
- direct descendant of Kin Canute + claimed promise throne
- supported by Tostig

NO
- Would be a brutal ruler (nickname "hardrai
- Could exploit England fo resources
- Unpopular and could cau rebellion in England
- Could he be effective rul 3 countries at once?

Chemistry Booklet



Belfast Royal Academy
Form 1 Chemistry

Notebook

CHEMISTRY
IS

9	92	7
F	U	N

Contents

Thinking Skills

Icon	Thinking Skill
	Observation
	Practical Work
	Memory
	Evaluation, problem solving
	Managing information
	Think outside the Box! Being creative

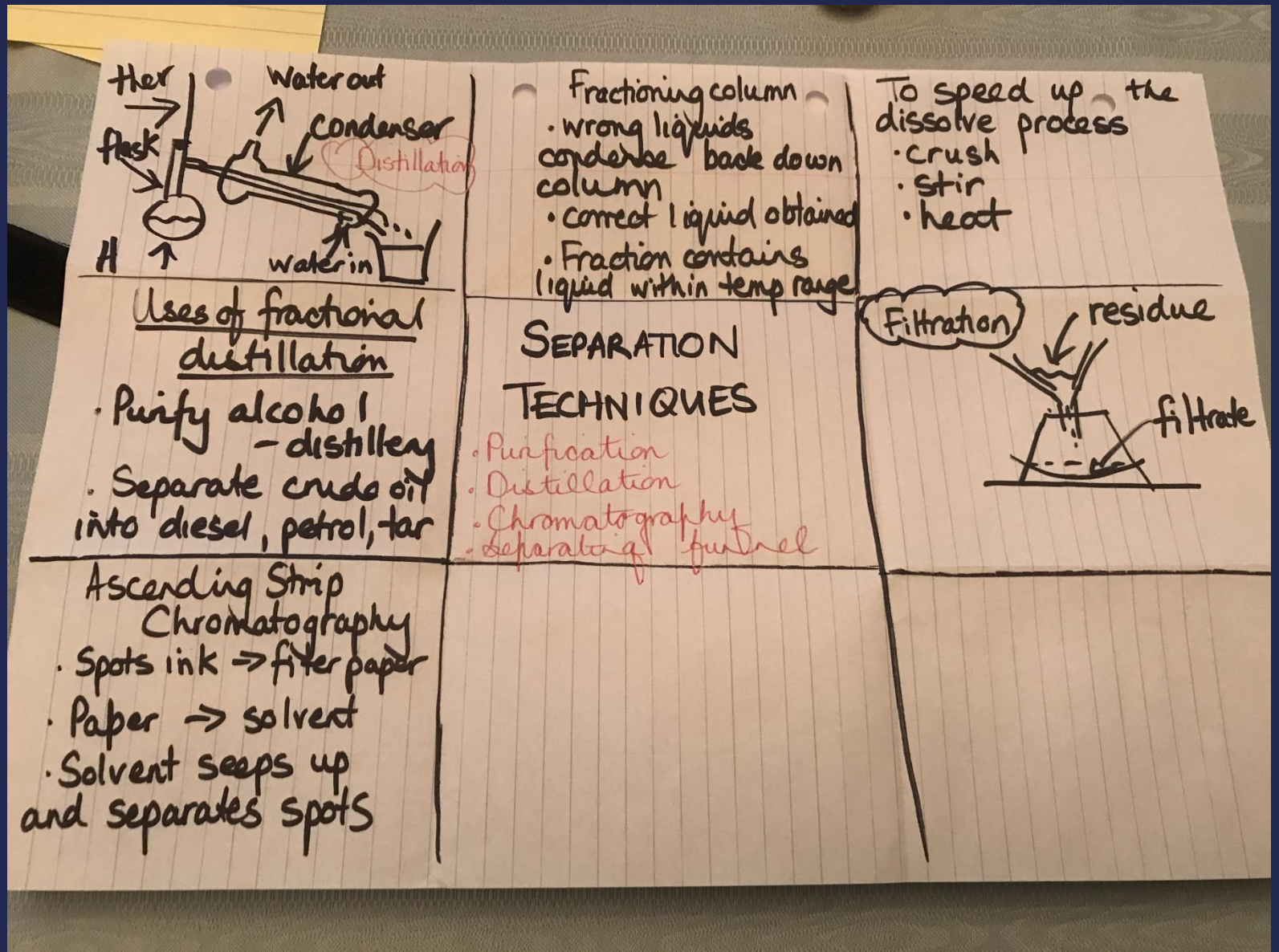
ROYAL BELFAST ACADEMY 1785 1880 1888

will be a charge to replace this booklet.

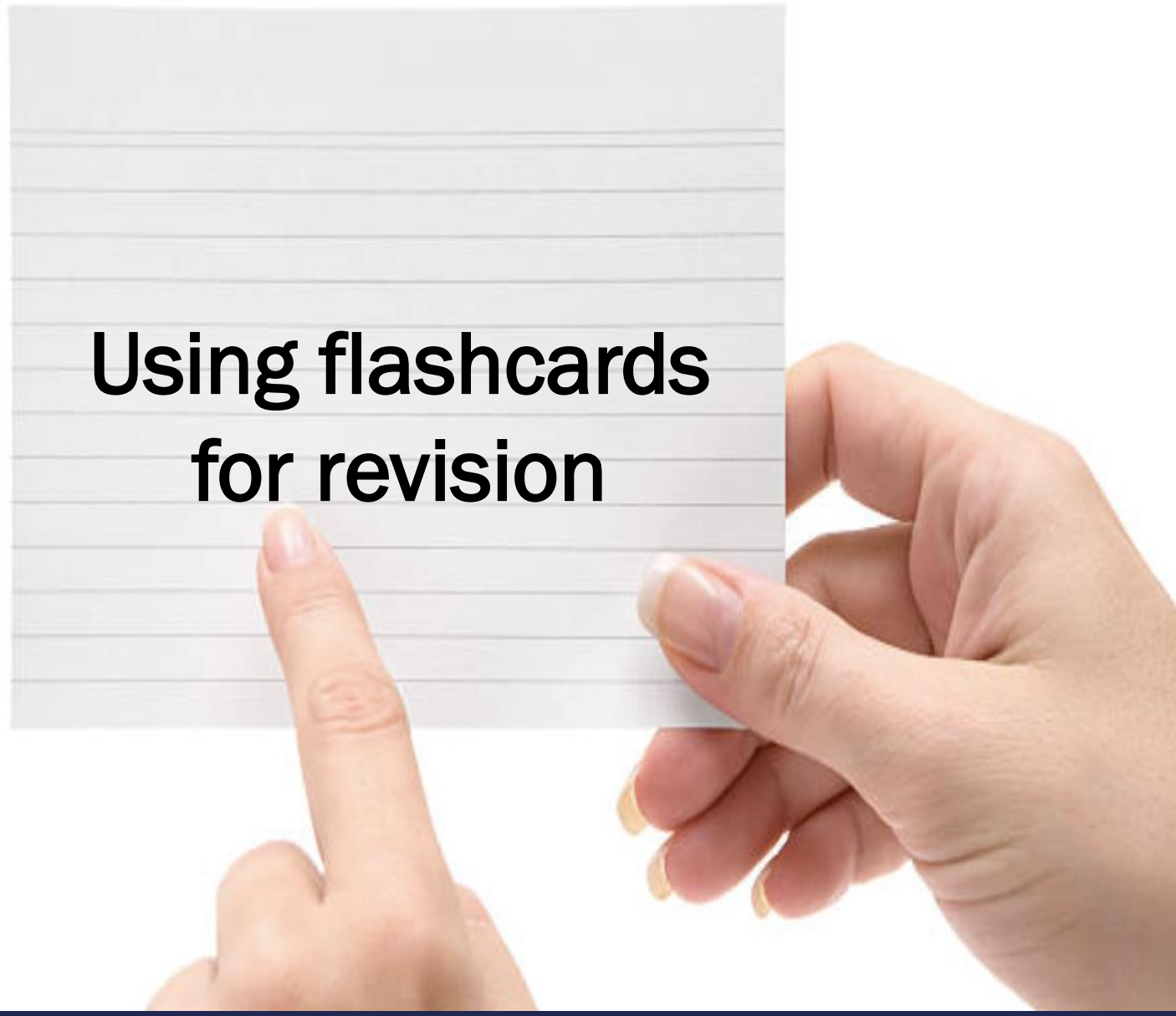
Name _____ **Class** _____

Teacher _____

Transform each topic to one A4 page

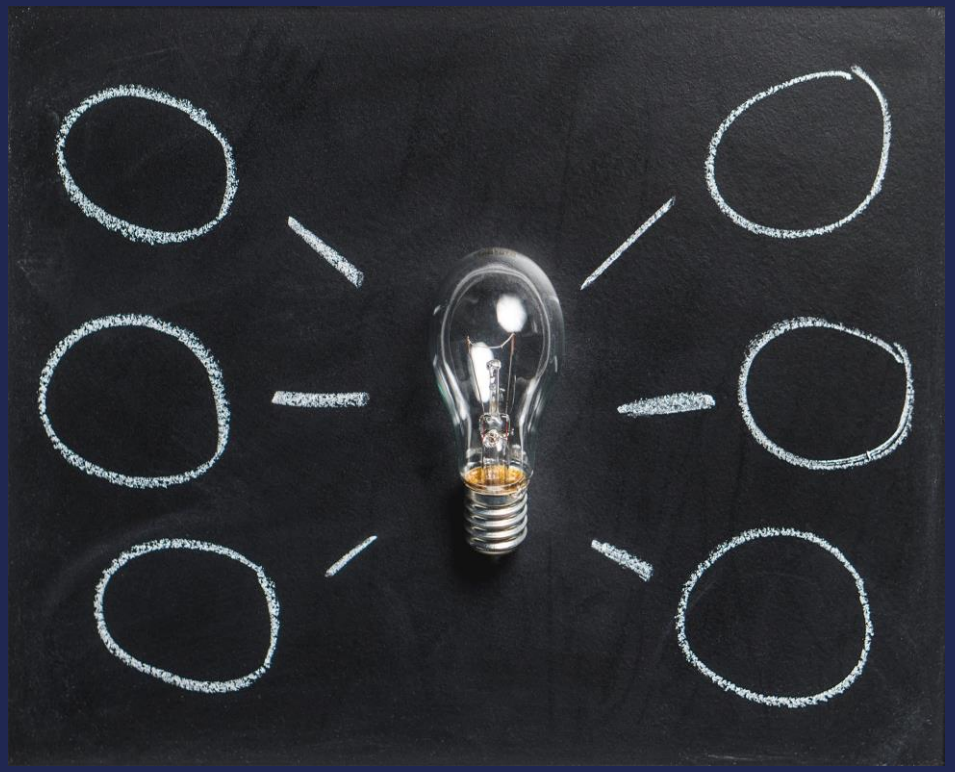


Using flashcards for revision

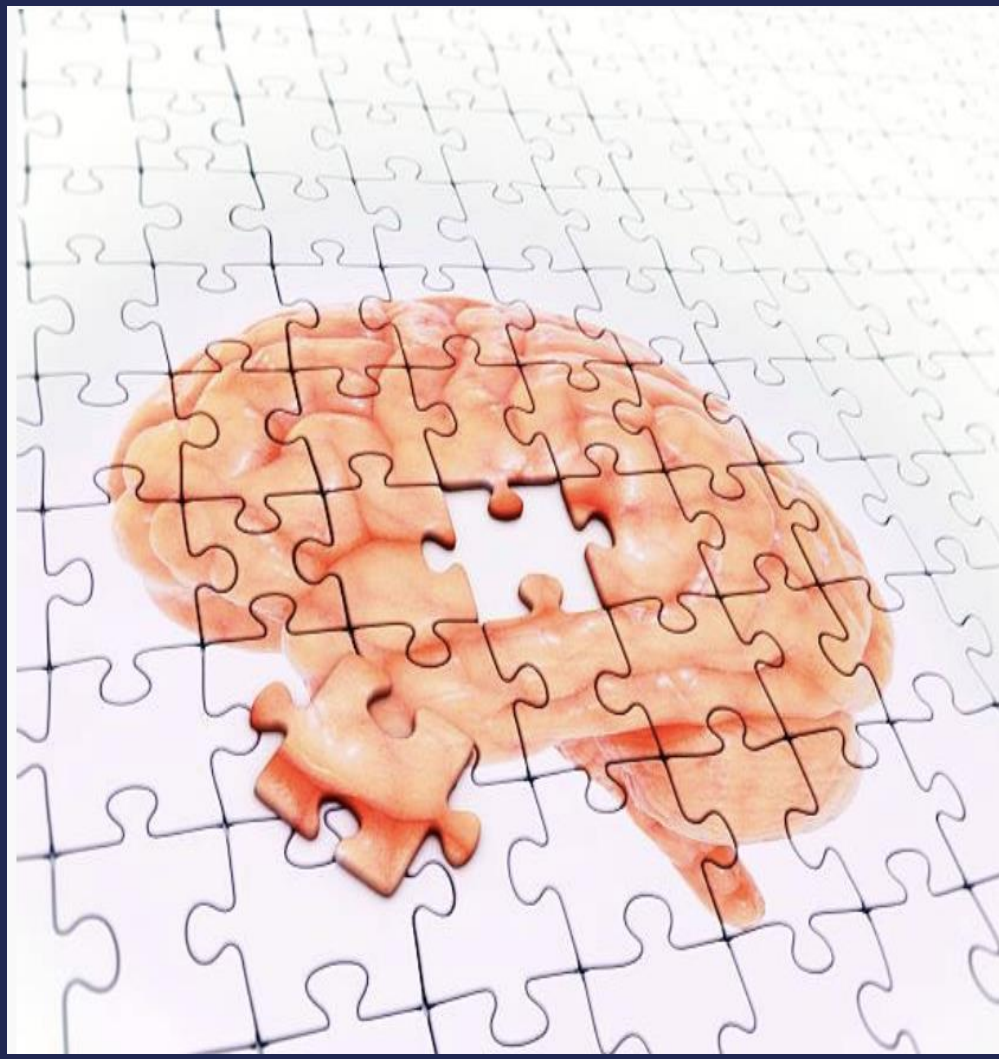


Using flashcards

- Using flashcards is a repetition strategy.
- They are a simple ‘cue’ on the front and an ‘answer’ on the back.
- Flashcards engage “active recall”.



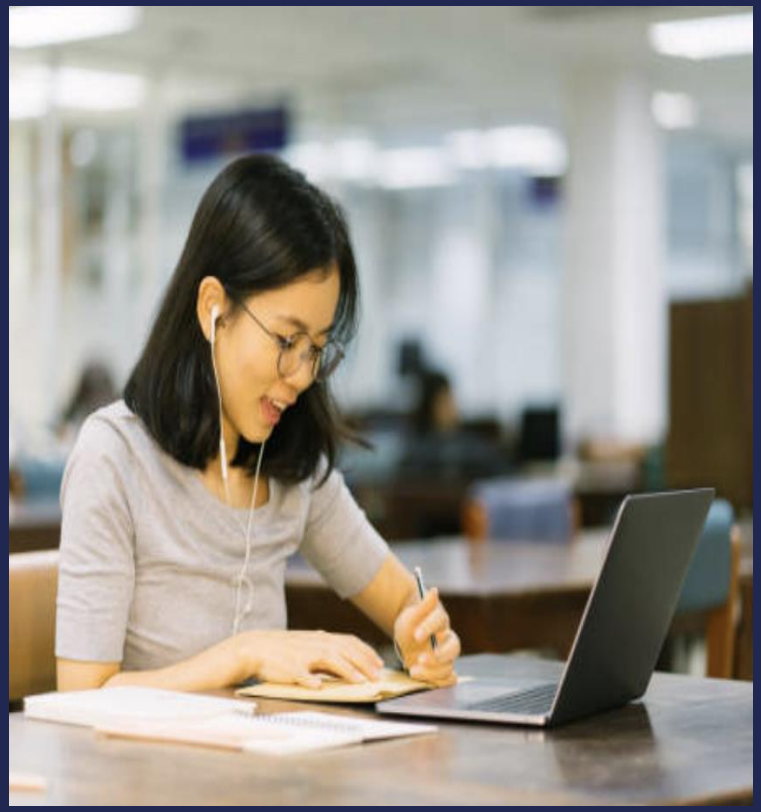
There are many reasons why flashcards can help you learn….



Why flashcards help you learn

- **They engage in ‘Active recall’ –** this creates stronger connections for your memory to recall information.

- **They promote self-reflection** – also known as **metacognition** which ingrains knowledge into your memory.



Why flashcards help you learn

- **Metacognition -** When you make and use flashcards, you take control of your own learning.
- You have to decide what to put on each card, how often you're going to use them, then evaluate how well you know the information on each card.
- By doing all these things, you are using **"metacognitive processes",** which have been proven to enhance long-term learning.

Why flashcards help you learn

- **They help you memorise facts quickly.**
- **Drilling -** flashcards help you to practise the same information over and over again - and as we know, practice makes perfect!

You need to ‘be smart’ when making & using flashcards to make sure you are effective….

How to make flashcards

1. Ensure that the flashcards have a **question or key term** on one side and the **answer or definition** on the other.
   - The flashcard must work the memory.
   - If flashcards only contain notes then no **retrieval practice** will be happening.

How to make flashcards

2. Ensure the right questions and knowledge are on the cards.

3. Keep information as short as possible.

4. Write clearly. You should be able to read what you wrote at a very quick glance.

How to make flashcards

5. Use different **coloured cards or pens** to categorise your flashcards. For example, use a different colour for each subject or topic. This can help your brain to categorise information better.

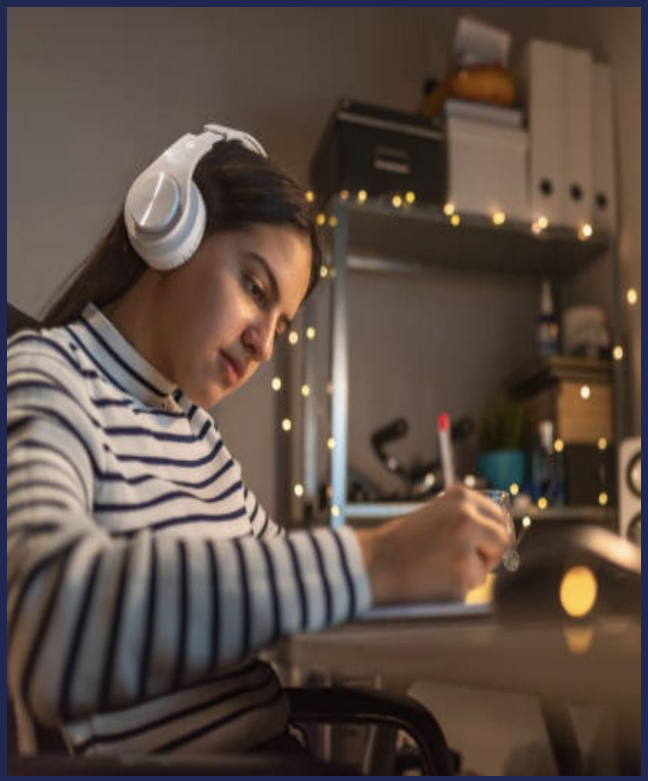
Being smart when using flashcards

Studies have found that it's more effective to **review a whole stack** of **cards in one sitting** rather than to carry them around with you and glance at them every so often.

Flashcards are not an effective method for last-minute cramming!

Being smart when using flashcards

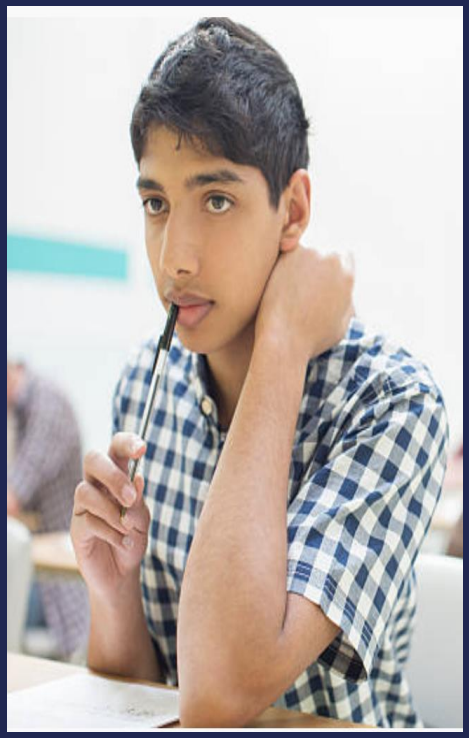
Use Spaced repetition - Review your cards at specific, increasing intervals: for example on Day 1, Day 2, Day 4, Day 8 and so on. Spaced repetition works because it activates your long-term memory, while leaving small breaks in-between studying uses your short-term memory.



Being smart when using flashcards

- Make sure you have a **‘thinking pause’** after picking one up and reading the question, then turn the card over to read the information.

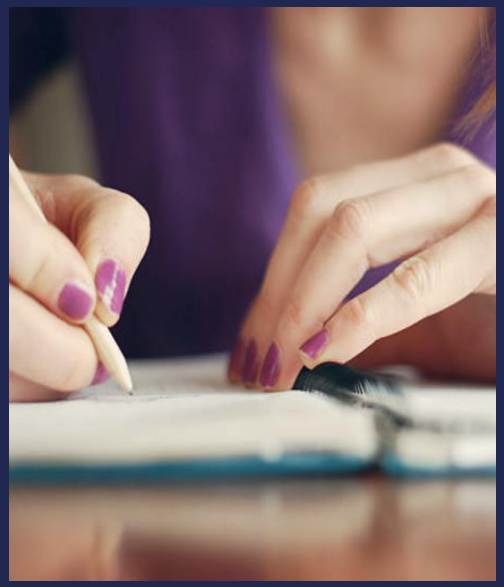
- Once you get an answer right using your flashcards – **DO NOT DISCARD IT**! You need to keep **repeating the questions** even if you get it right multiple times otherwise it will fall off your memory.



Being smart when using flashcards

- As well as retrieving your knowledge, **try writing the answer or definition in your own words and giving examples.** This will help your learning and recall.

- **Try 'interleaving'.** Once you have several decks of flashcards for different subjects and topics try mixing them up. This will test your knowledge across subjects in a single session. Make sure **you are confident** enough to do this every so often.



Use a system to revise with flashcards

The **Leitner system** is a well-known and very effective method of using flashcards. It's a form of **spaced repetition** that helps you study the cards you don't know more often than the cards you know well.

In the 1970s, a German populariser of science, Sebastian Leitner, developed the method.

https://www.parent24.com/Learn/School-exams/watch-how-to-study-using-flashcards-20160825

Leitner System – The Method

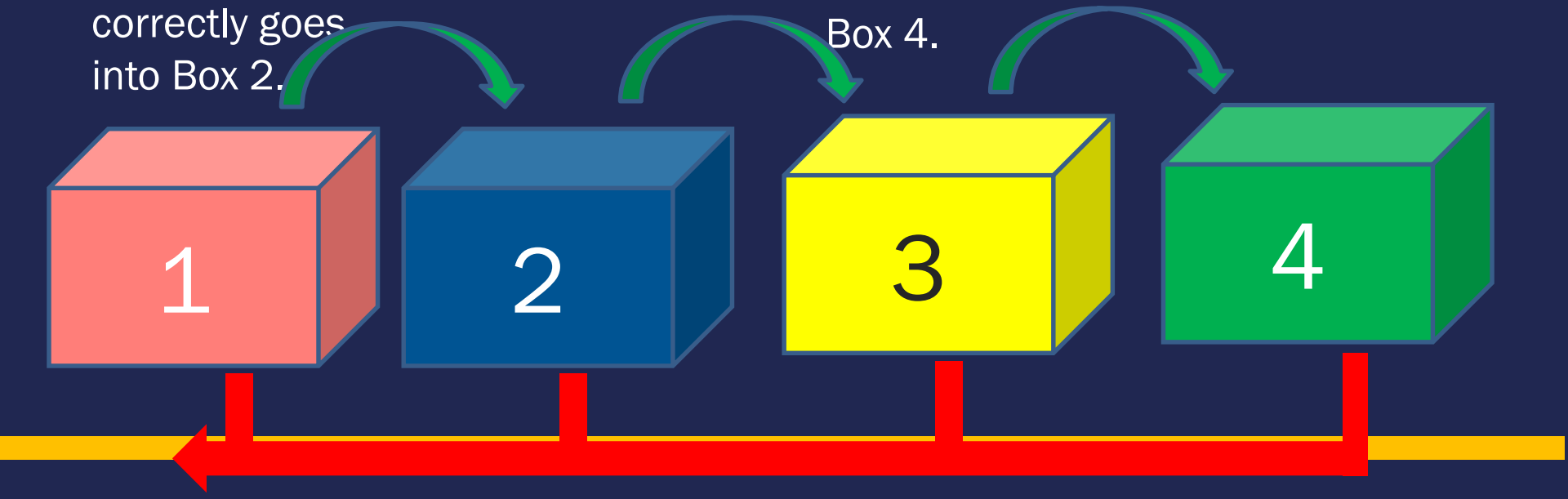
All flash cards start off in Box / Stack 1.

As you review the cards, each card you answer correctly goes into Box 2.

If you give the wrong answer the card stays in box 1.

When you review cards in Box 2, if you still get it right you move the card to box 3 and so on until all cards are in Box 4.

If you get a card wrong in any box, it goes back to Box 1.



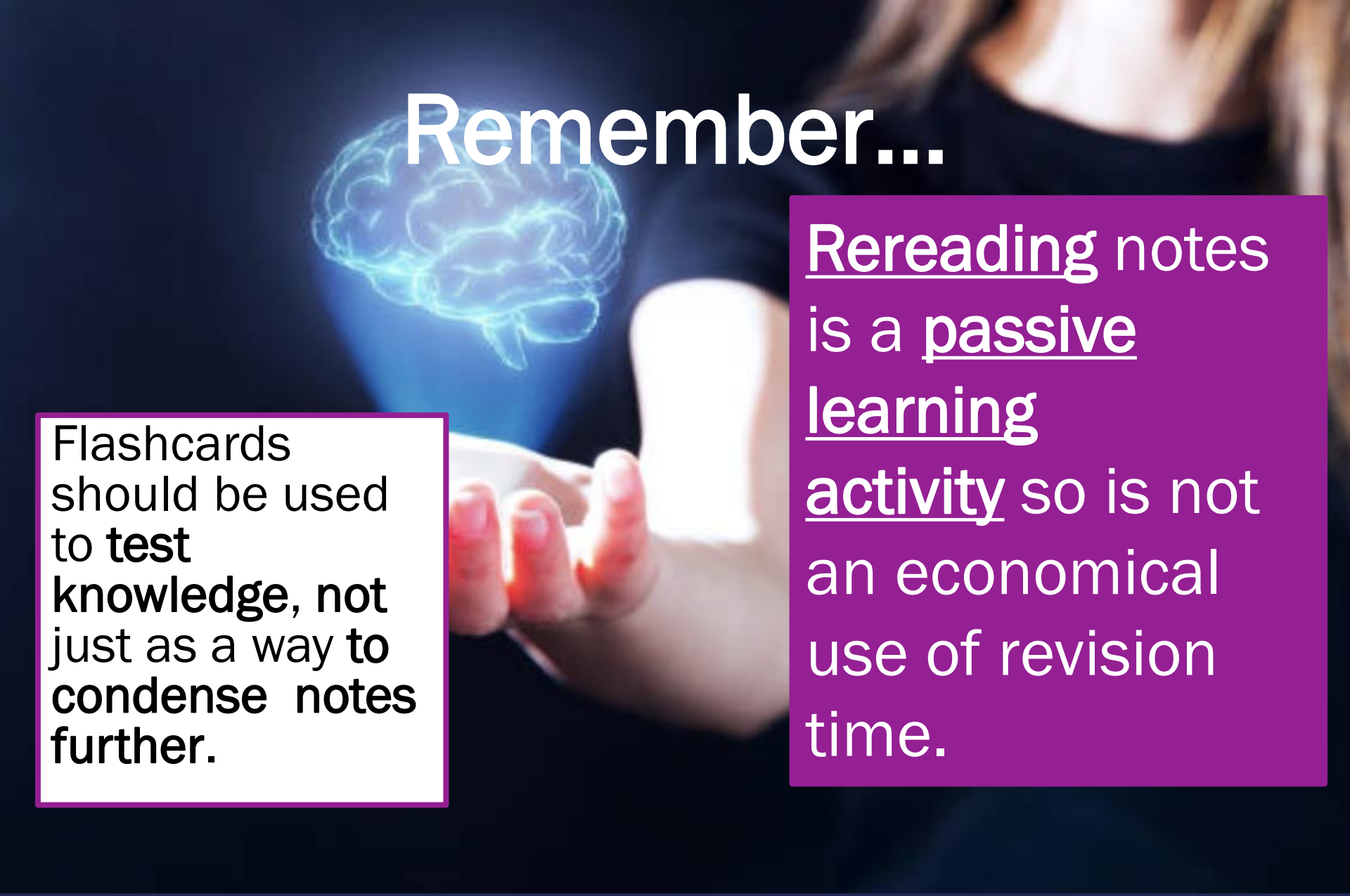
Leitner System – The Key

The key is that the cards you know less well are reviewed more frequently than the cards in the higher boxes.

You now must choose the frequency at which you review each box.

Box 1: Every day
Box 2: Every 2 days
Box 3: Every 3 days
Box 4: Every 4 days

Remember...



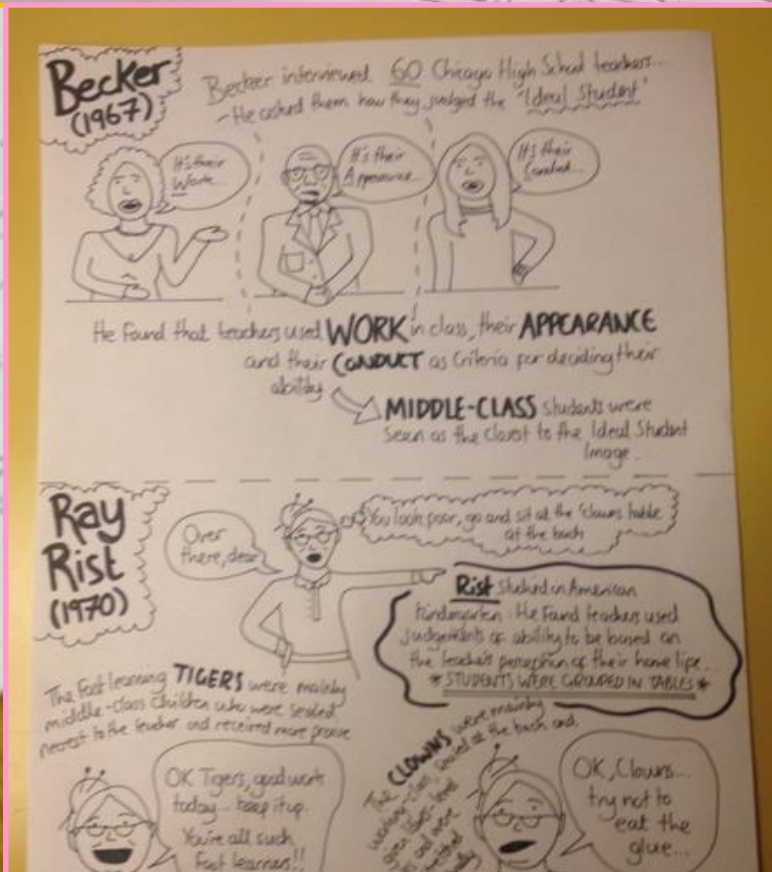
Flashcards should be used to **test knowledge, not** just as a way **to condense notes further.**

Rereading notes is a **passive learning activity** so is not an economical use of revision time.

Revising Mathematics

- Learn formulae (use flashcards)
- Test learning by practising questions
- Re-do homework questions without notes and then check answers
- Check how to set out method correctly from notebook
- Identify any topics of concern and speak to teacher

Revision books – mix it up!

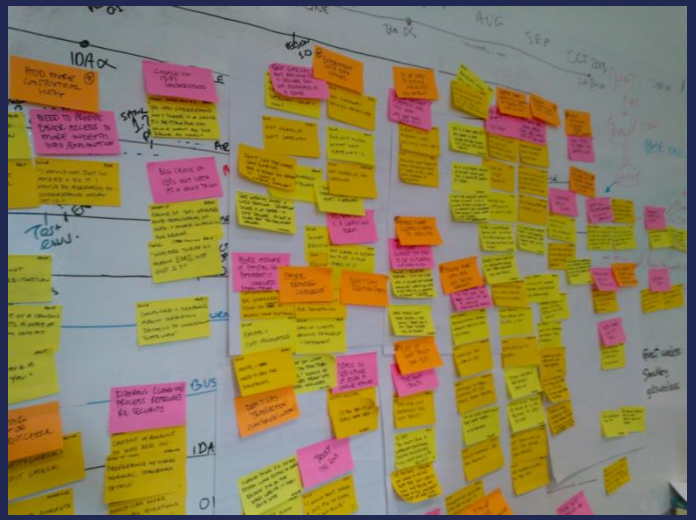


Mind map Papers

- Write an essay or exam questions on A3/A4 paper.
- Mind map as much as possible in relation to the question.
- When finished, the student can use their notes to add more detail *(in another colour so they know what to go over)*

Post-its and posters

- Movable revision!
- Students can stick them around the house
- Don’t let students put them EVERYWHERE– it may be overwhelming



RAGing

- For unit topics
- For subtopics
- For specific key terms/ key events etc.
- Auditing knowledge

Revision Tip

Paragraph Summaries

HIGHLIGHTING DOESN'T WORK!

It can be a good method for picking out key chunks of information of key words – but how many times have your child's sheets looked like this?

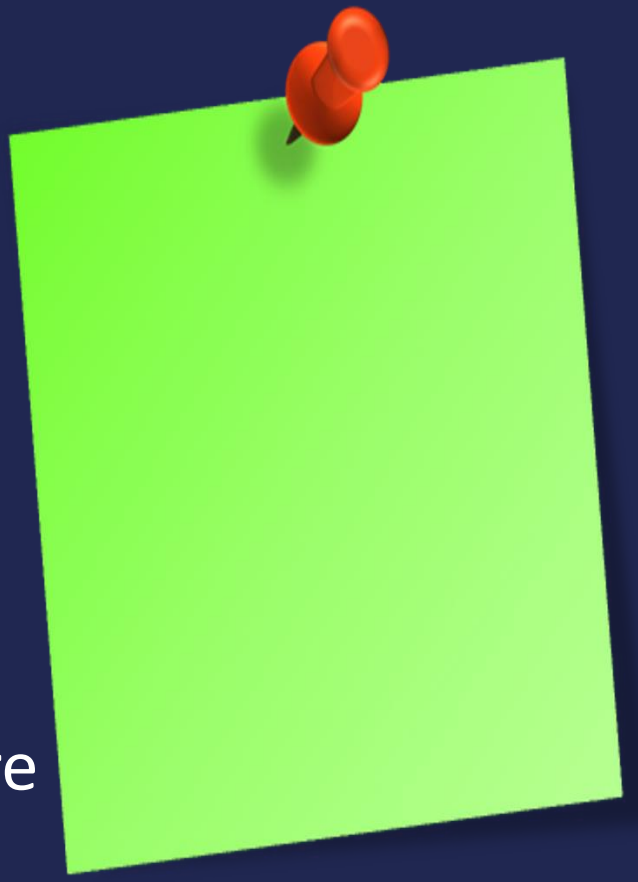
Why doesn't highlighting work?

- One of the main problems is that it is already a very familiar strategy and using it **involves little effort.**
- Most people don't have a strategy for highlighting.
- Another reason to ditch the highlighters is that **when a revision technique feels too easy, it usually is.**
- Scientists have found that successful revision should involve **'desirable difficulty'.**
- The added difficulty is harder to stick with but it proves **longer lasting in the memory.**

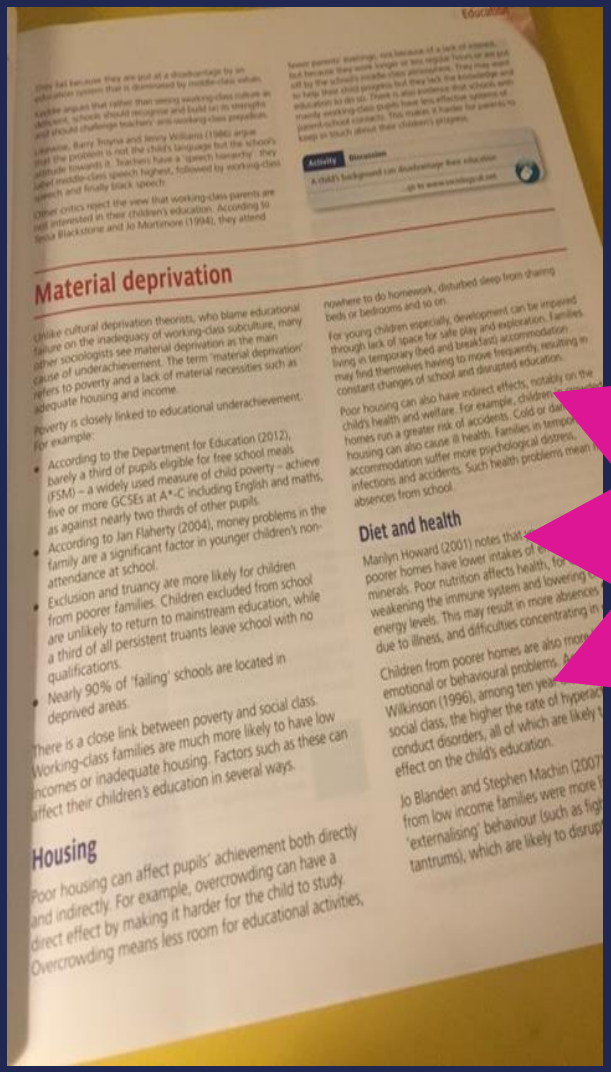
Try this instead…

- At home, set the task of reading through a text and making notes, ask your child to write a post-it summary at the end of each paragraph.

- This exercise forces them to extract the key meaning from the paragraph and reduce it down to something more palatable and memorable.



e.g.



Material deprivation

Unlike cultural deprivation theorists, who blame educational failure on the inadequacy of working-class subculture, many other sociologists see material deprivation as the main cause of underachievement. The term 'material deprivation' refers to poverty and a lack of material necessities such as adequate housing and income.

Poverty is closely linked to educational underachievement. For example:

- According to the Department for Education (2012), barely a third of pupils eligible for free school meals (FSM) – a widely used measure of child poverty – achieve five or more GCSEs at A*-C including English and maths, as against nearly two thirds of other pupils.
- According to Jan Flaherty (2004), money problems in the family are a significant factor in younger children's non-attendance at school.
- Exclusion and truancy are more likely for children from poorer families. Children excluded from school are unlikely to return to mainstream education, while a third of all persistent truants leave school with no qualifications.
- Nearly 90% of 'failing' schools are located in deprived areas.

There is a close link between poverty and social class. Working-class families are much more likely to have low incomes or inadequate housing. Factors such as these can affect their children's education in several ways.

Housing

Poor housing can affect pupils' achievement both directly and indirectly. For example, overcrowding can have a direct effect by making it harder for the child to study. Overcrowding means less room for educational activities,

nowhere to do homework, disturbed sleep from sharing beds or bedrooms and so on.

For young children especially, development can be impaired through lack of space for safe play and exploration. Families living in temporary (bed and breakfast) accommodation may find themselves having to move frequently, resulting in constant changes of school and disrupted education.

Poor housing can also have indirect effects, notably on the child's health and welfare. For example, children ... homes run a greater risk of accidents. Cold or da... housing can also cause ill health. Families in tempo... accommodation suffer more psychological distress, ... infections and accidents. Such health problems mean ... absences from school.

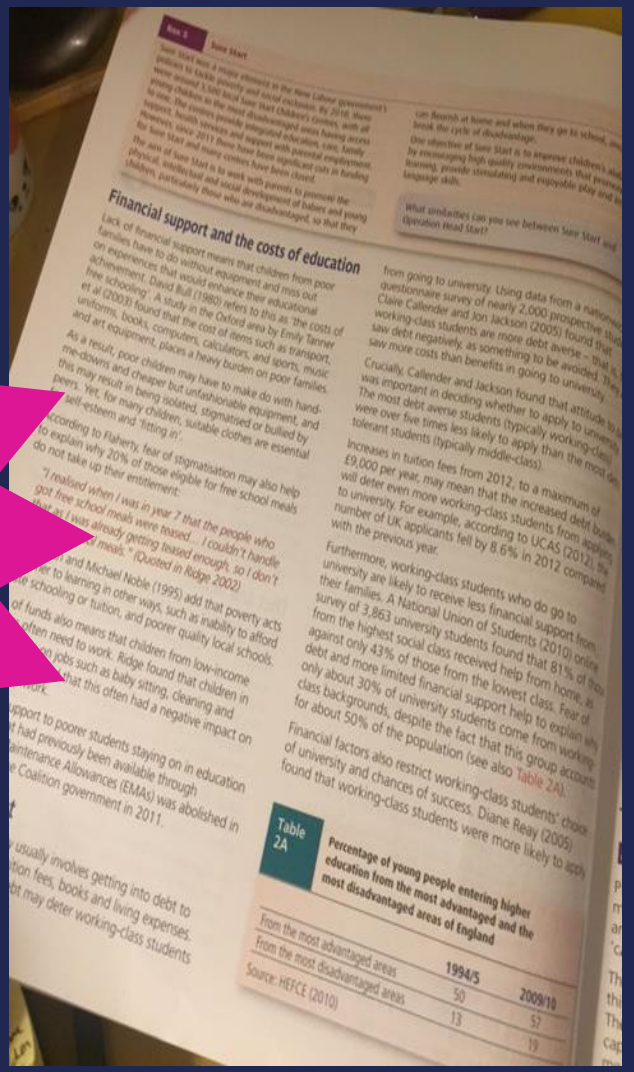
Diet and health

Marilyn Howard (2001) notes that ... poorer homes have lower intakes of ... minerals. Poor nutrition affects health, for ... weakening the immune system and lowering ... energy levels. This may result in more absences ... due to illness, and difficulties concentrating in ...

Children from poorer homes are also more ... emotional or behavioural problems. ... Wilkinson (1996), among ten year ... social class, the higher the rate of hyperac... conduct disorders, all of which are likely t... effect on the child's education.

Jo Blanden and Stephen Machin (2007 ... from low income families were more l... 'externalising' behaviour (such as figh... tantrums), which are likely to disrup...

From these two pages in a text book…



Financial support and the costs of education

Lack of financial support means that children from poor families have to do without equipment and miss out on experiences that would enhance their educational achievement. David Bull (1980) refers to this as 'the costs of free schooling'. A study in the Oxford area by Emily Tanner et al (2003) found that the cost of items such as transport, uniforms, books, computers, calculators, and sports, music and art equipment, places a heavy burden on poor families.

As a result, poor children may have to make do with hand-me-downs and cheaper but unfashionable equipment, and this may result in being isolated, stigmatised or bullied by peers. Yet, for many children, suitable clothes are essential for self-esteem and 'fitting in'.

According to Flaherty, fear of stigmatisation may also help to explain why 20% of those eligible for free school meals do not take up their entitlement:

> "I realised when I was in year 7 that the people who got free school meals were teased ... I couldn't handle [it] as I was already getting teased enough, so I don't [get] free meals." (quoted in Ridge 2002)

... and Michael Noble (1995) add that poverty acts ... to learning in other ways, such as inability to afford ... schooling or tuition, and poorer quality local schools. ... of funds also means that children from low-income ... often need to work. Ridge found that children in ... jobs such as baby sitting, cleaning and ... that this often had a negative impact on ... work.

... support to poorer students staying on in education ... had previously been available through ... maintenance Allowances (EMAs) was abolished in ... Coalition government in 2011.

... usually involves getting into debt to ... tion fees, books and living expenses. ... bt may deter working-class students from going to university. Using data from a nationwide questionnaire survey of nearly 2,000 prospective students, Claire Callender and Jon Jackson (2005) found that working-class students are more debt averse – that is, they saw debt negatively, as something to be avoided. They saw more costs than benefits in going to university.

Crucially, Callender and Jackson found that attitude to debt was important in deciding whether to apply to university. The most debt averse students (typically working-class) were over five times less likely to apply than the most debt tolerant students (typically middle-class).

Increases in tuition fees from 2012, to a maximum of £9,000 per year, may mean that the increased debt burden will deter even more working-class students from applying to university. For example, according to UCAS (2012), the number of UK applicants fell by 8.6% in 2012 compared with the previous year.

Furthermore, working-class students who do go to university are likely to receive less financial support from their families. A National Union of Students (2010) online survey of 3,863 university students found that 81% of those from the highest social class received help from home, as against only 43% of those from the lowest class. Fear of debt and more limited financial support help to explain why only about 30% of university students come from working-class backgrounds, despite the fact that this group accounts for about 50% of the population (see also Table 2A).

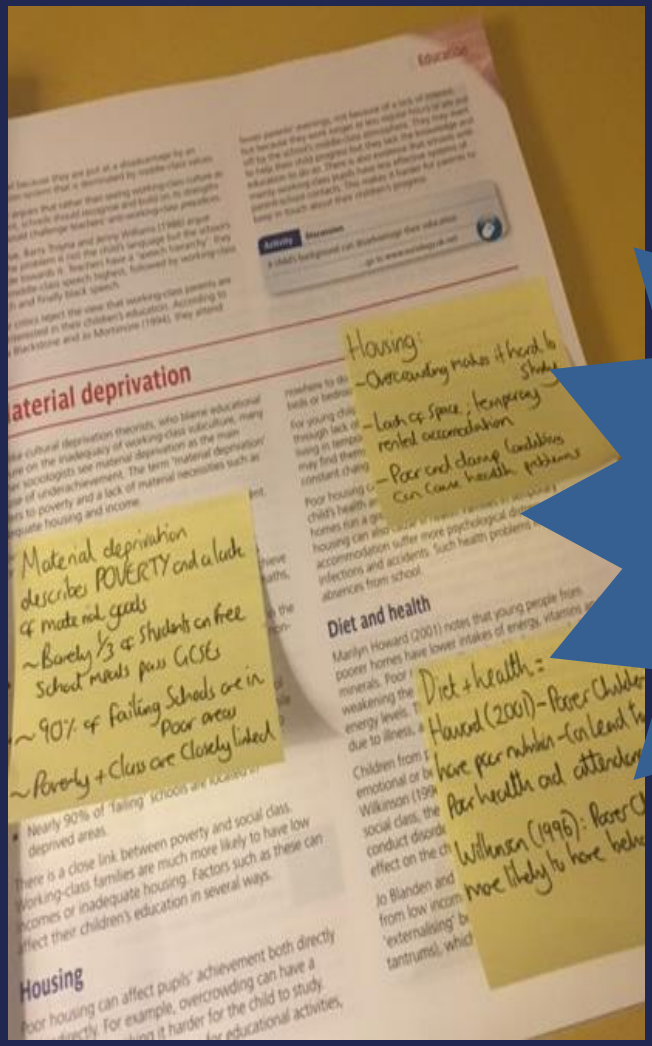
Financial factors also restrict working-class students' choice of university and chances of success. Diane Reay (2005) found that working-class students were more likely to apply

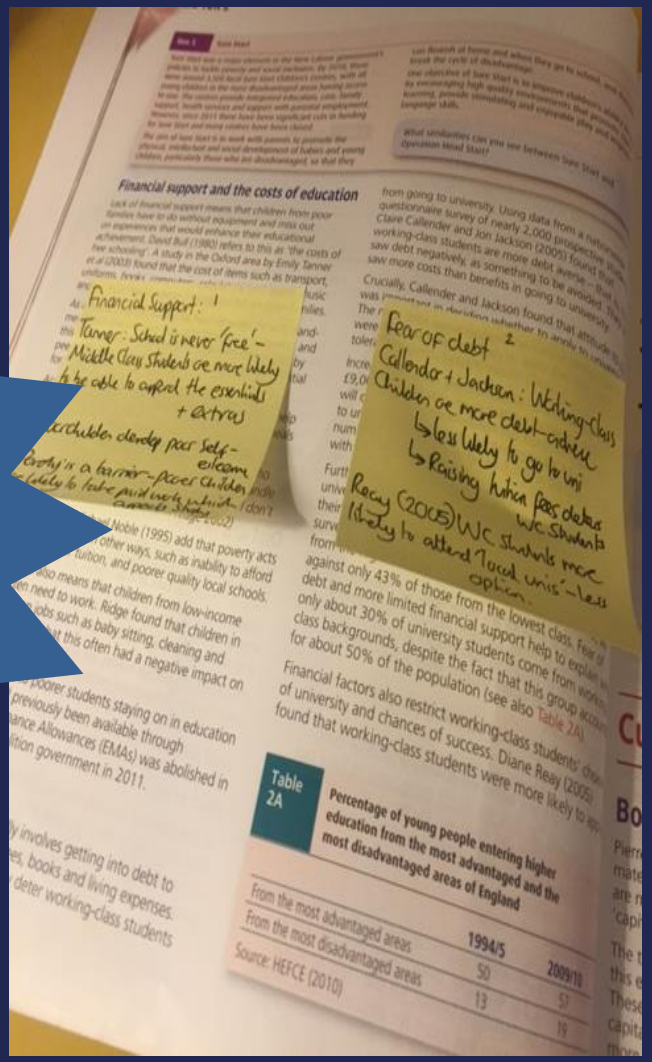
Table 2A Percentage of young people entering higher education from the most advantaged and the most disadvantaged areas of England

	1994/5	2009/10
From the most advantaged areas	50	57
From the most disadvantaged areas	13	19

Source: HEFCE (2010)

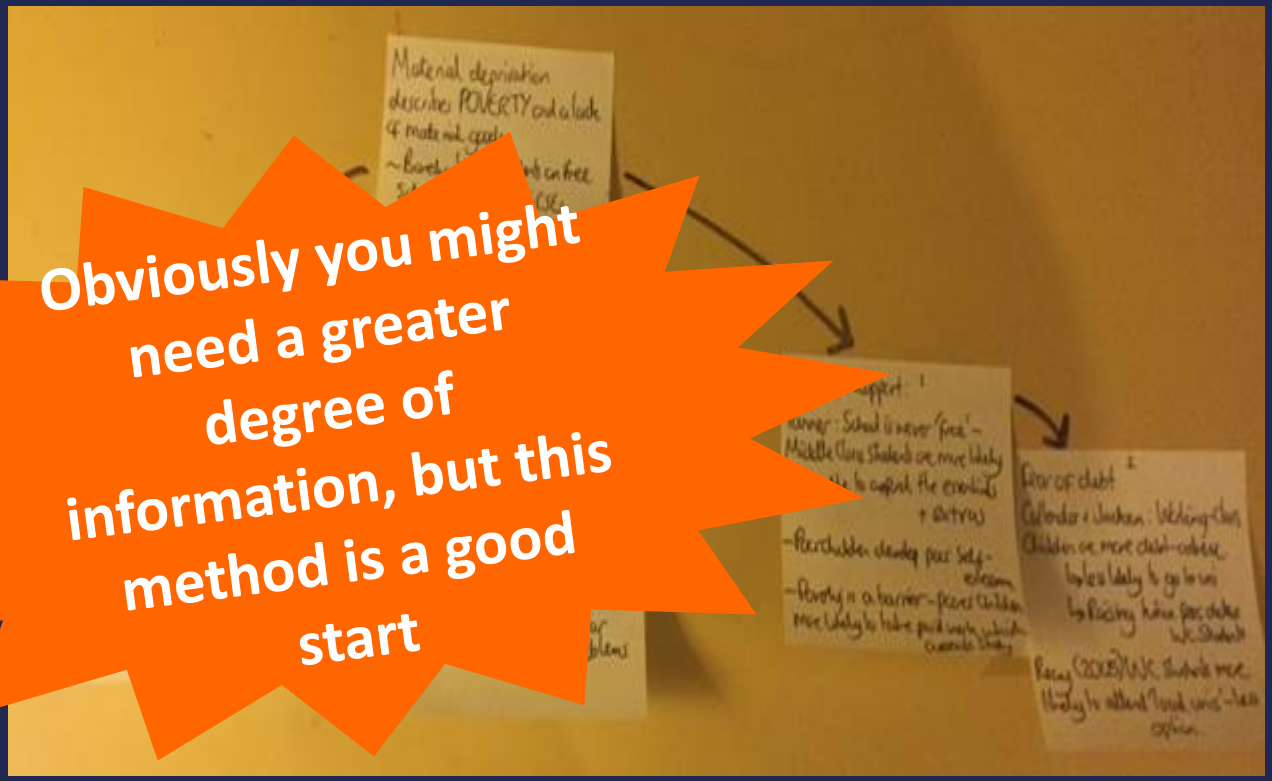
To 5 brief Post-Its





If you then take the post-its away from the text, you have a series of notes that can be arranged

- For self-testing
- To sequence key points into a flowchart or diagram



Obviously you might need a greater degree of information, but this method is a good start

SO to summarise…

How to support effective pupil revision:

Make sure your child knows WHAT they need to learn

Make sure they now WHEN / HOW they will be assessed and make sure revision is distributed and interleaved practice

Show them HOW to test themselves or test them yourself with the flashcards

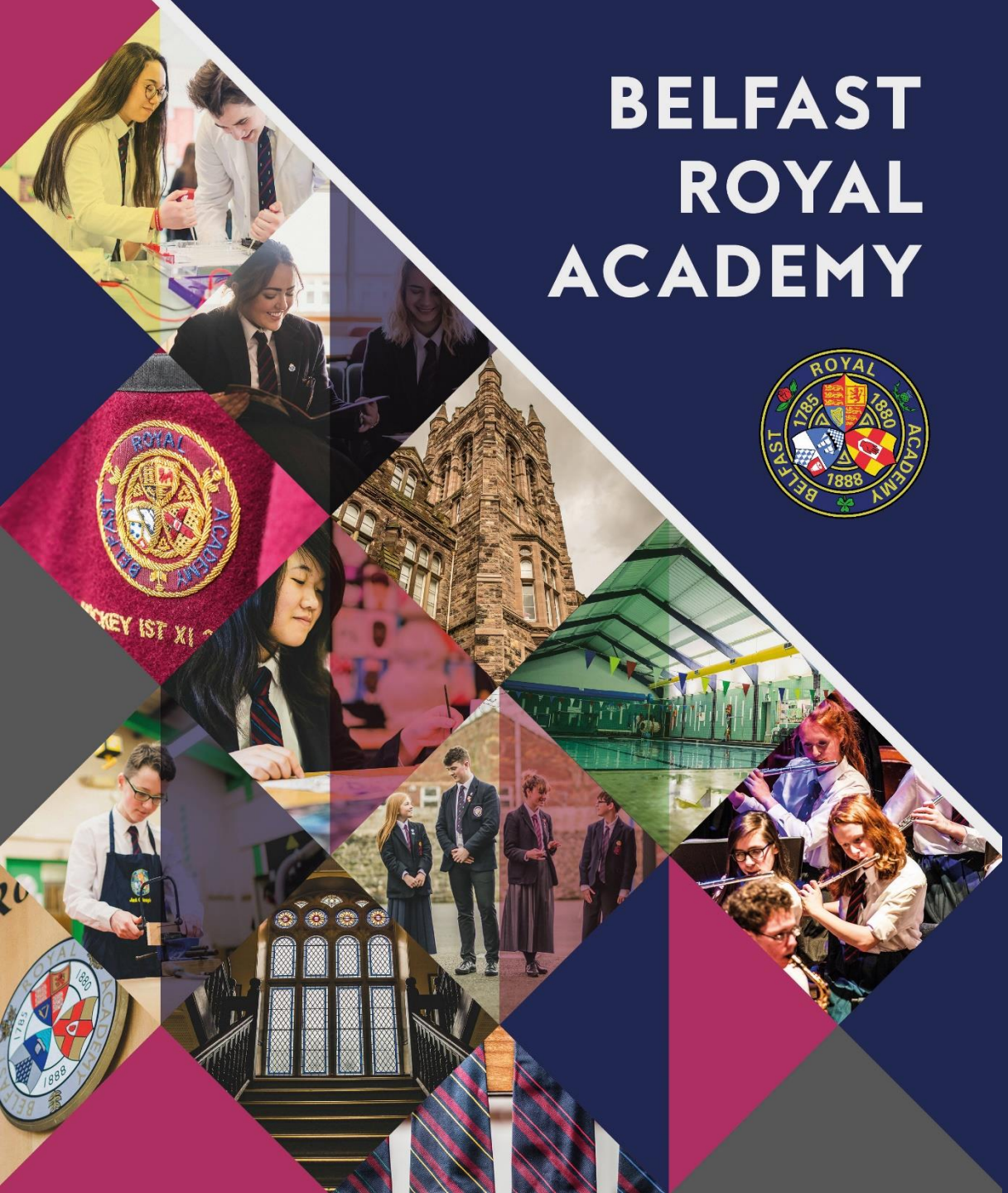
WHERE to go for help

Finally, keep a balance

- Revision
- A good night's sleep

- Exercise

- Relaxation



BELFAST ROYAL ACADEMY

Parents' Guide

How to Revise