





- Stress
- Multi-tasking particularly using technology
- Procrastination
- Fixed mindset



Study skills in Mathematics

Ms Sara Woolley

Head of Mathematics



In class:

- Discover new concepts through activities
- Introduce the language of the topic
 - definitions and notation
- Examples models for setting out
- Apply skills

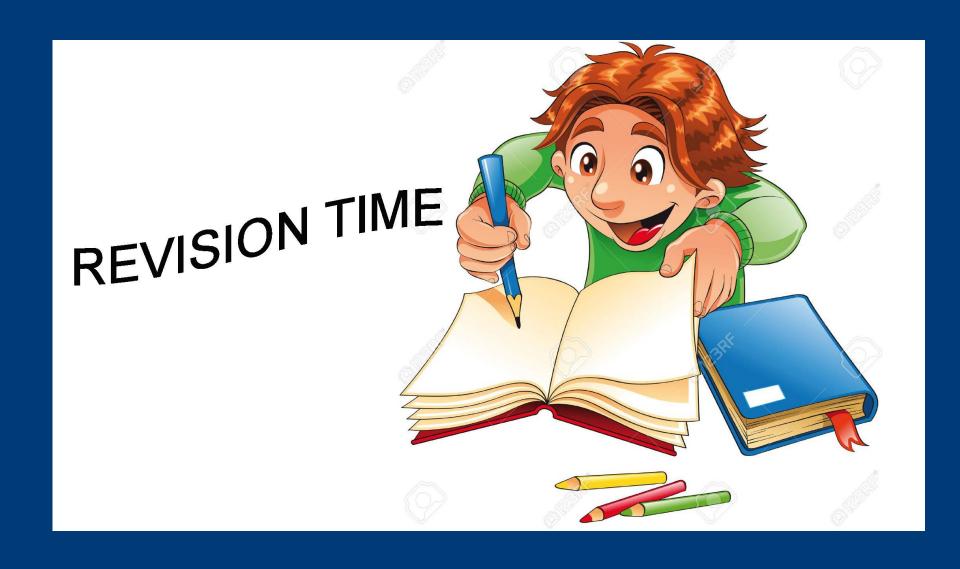




Home learning:

- Consolidation of skills developed in class
- Application of skills to varied / extended response style questions
- Revision opportunities







In each homework session, build in a revision cycle of prior learning:

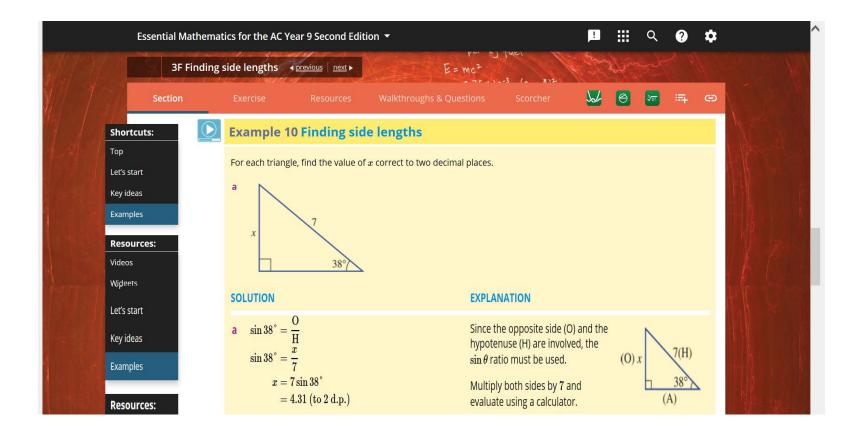
- Review
- Practise
- Follow-up



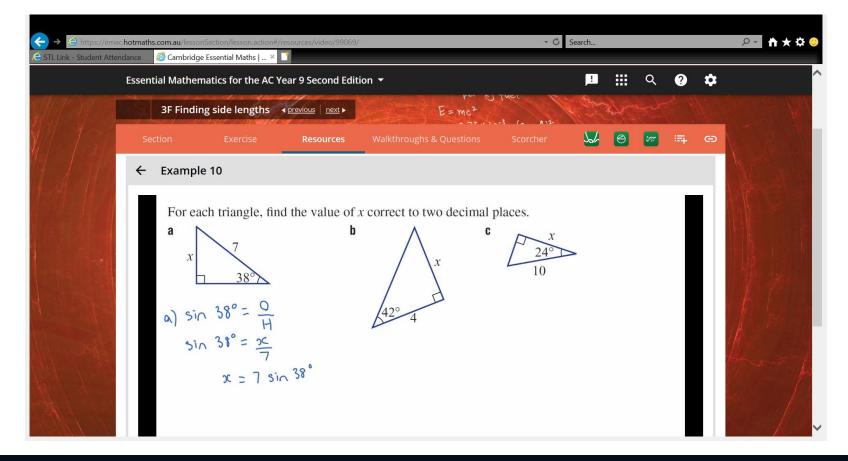


- Review the day's/week's class notes, in particular the examples.
 - Does each step in the example make sense?
 - _o It's not about memorising the steps but understanding what comes next and why.
- View extra examples: textbook examples with explanations and online videos.
- Seek teacher help the next lesson about any uncertainties.

Review



Review





- Complete questions
 - extra textbook questions
 - teacher handouts
 - online quizzes and worksheets (HOTmaths)
- Use feedback to focus on particular areas quality practice not just quantity





• Number skills - do not reach for the calculator each time

- Test and exam technique:
 - re-read questions
 - highlight key information
 - check answers
 - o does the answer makes sense?
 - base units been included and correct rounding applied?





- Seek clarification on concepts unsure about
- Mid-topic quiz may highlight areas of difficulty to revisit
- Create and update summary notes:
 - add interesting questions/ideas
 - o maintain a list of errors that have been made
 - add own reminders: 'use a diagram', 'do not round during a question', ...





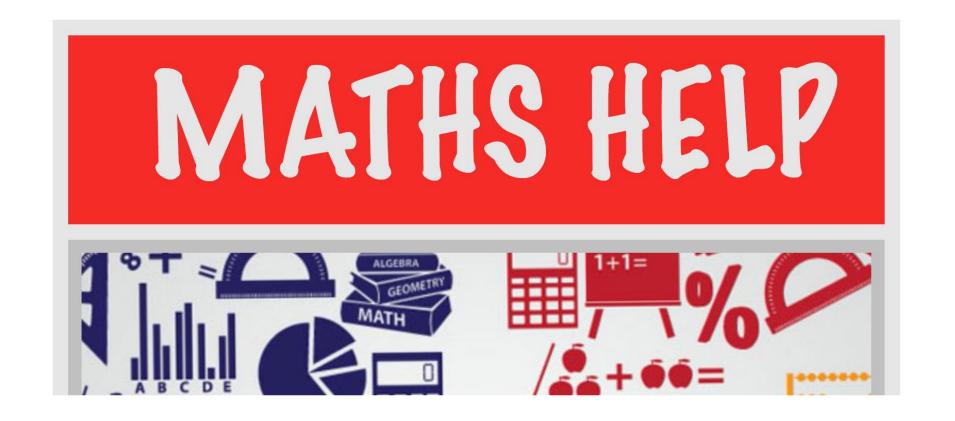
Learning Mathematics

Work in Mathematics requires regular attention.

There are *always* ways to improve.

Students should make use of their class teacher.



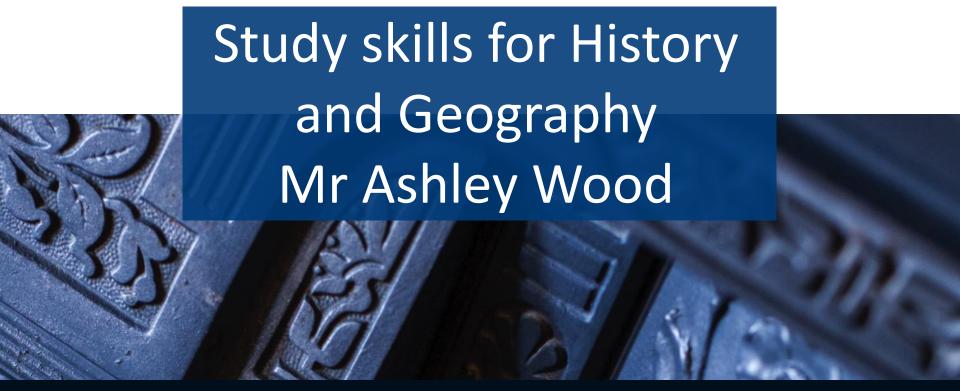


Year 7: Wednesdays, 7:45 am, MS3.14

Year 8: Wednesdays, 7:45 am, MS3.12

Year 9: Thursdays, 7:45 am, LF1





1. Effective learning behaviours

2. Knowledge & skills: History

3. Knowledge & skills: Geography



- Setting goals;
- Time management and self management;
- Note-taking;
- Testing your own understanding; and
- Deep and elaborative processing
- Actively pursuing the three stages of each lesson







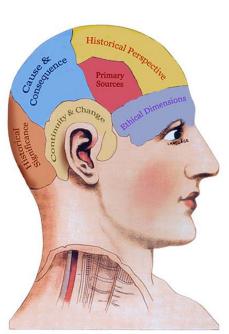




Knowledge: Precise historical knowledge includes key events, individuals, dates, figures and quotes.

Skills: The key historical skills we focus on are:

- 1. Establishing historical significance;
- 2. Using *primary source evidence*;
- 3. Identifying *continuity and change;*
- 4. Analysing cause and consequence;
- 5. Taking historical perspectives, and
- 6. Understanding ethical dimensions.







How can students embed historical knowledge? Students must test their recall of precise knowledge.

How do you develop historical skills?

<u>Historical reasoning:</u> When required to make a judgment: ensure responses have a clear contention; are supported by precise historical evidence: incorporate analytical reasoning. Use of evidence is a major discriminator between simplistic and sophisticated judgments.

<u>Source analysis:</u> Practice identifying the key features of a source (origin, purpose, accuracy of information, message) and reaching conclusions about usefulness and reliability.



2. Knowledge and Skills: Geography

Knowledge: Precise knowledge in Geography often requires a mastery of key terms and an understanding of different case studies.

Geographical concepts: Place, space, environment, interconnections, scale, sustainability and change.

Skills: The main geographic skills we focus on relate to dealing with geographical data and information in the following ways:

- Collecting and recording;
- Selecting, organising and representing; and
- Interpreting, analysing and evaluating.





Avoid general responses

Most geography questions have more than one correct response, so it's better to mention one example in detail rather than briefly describing many.

Where stimulus material is provided in tests or exams, students are expected to incorporate precise, detail such as data from a graph or map, to provide detail to responses.

Revise case studies from class

Use of case studies can add detail to responses so time should be spend revising key facts and figures .





Practice applying skills and knowledge

Often content covered in class needs to be applied to a case study in the exam. For example students may learn how to use grid references in class, can they then apply this to a new map or case study?

Mark allocation

The number of marks allocated should determine the amount of detail that a student includes in their response. For example, a 5 mark question should have 5 aspects to the response.





Stage 1: Prepare

- Make sure you are fully prepared for the lesson
- Mentally: Readings? Questions? Notes? Thoughts?
- Physically: Texts? Devices? Notebook

Stage 2: Engage

- Be 'present' during the lesson
- Engage as much as possible
- Be willing to offer thoughts and answers when prompted
- Understand that a wrong or incomplete answer helps learning

Stage 3: Review

- Think about the lesson within 24hrs
- Take a moment to actively review what was covered
- Use that as preparation for the next lesson

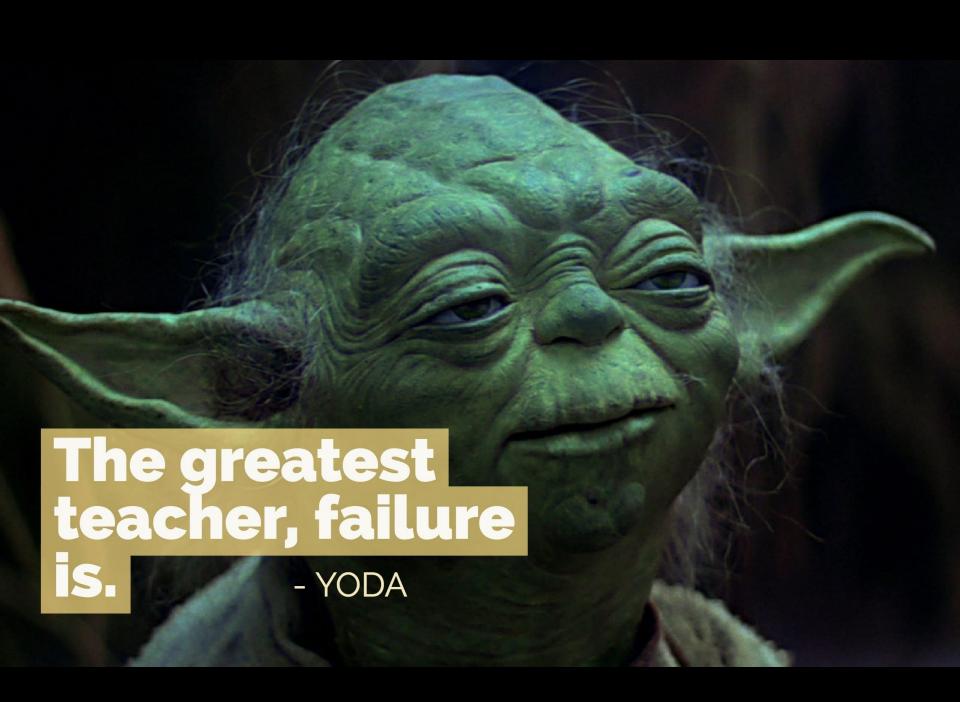




Previous lesson

Current lesson

Next lesson...



So remember...

To study effectively in either History or Geography, once you understand the knowledge and skills being tested, you must make decisions about how and when you are going to use different types of study skills.

All effective learning behaviors incorporate the following:

- Setting goals;
- Time management and self management;
- Note-taking;
- Testing your own understanding;
- Deep thinking both inside and outside the classroom;
- Embracing the opportunity to learn from mistakes



Studying English in Middle School

Ms Prudence Meggitt

Conceptual Understanding

"Conceptual thinking [in English] requires the ability to critically examine [texts]; relate to prior knowledge; see patterns and connections; evaluate the truth of the understandings across time or situations; and, often, use the conceptual understanding to [...] create."

Lynn Erikson, Concept-Based Curriculum for the Thinking Classroom

In our Middle School English classrooms, concepts include:

Year 7 – Identity and Belonging

Year 8 – Communication and Creativity

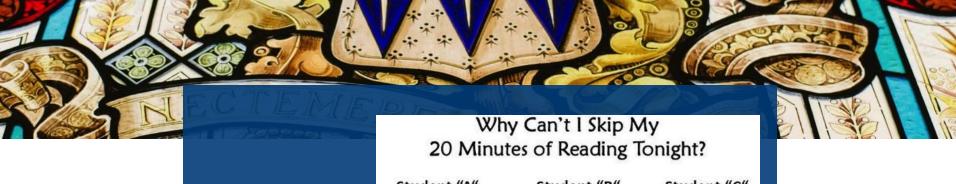
Year 9 – Perspective and Place; Agency





- Reading
- Speaking
- Listening
- Writing
- Thinking
- Collaborating





"You get to feel things, visit places and worlds you would never otherwise know. You learn that everyone else out there is a me, as well. You're being someone else, and when you return to your own world, you're going to be slightly changed."

Neil Gaiman

Student "A"

Student "B"

Student "C"

reads 20 minutes
each day
each day

3600 minutes in
a school year

Student "B"
reads 1 minute
reads 1 minute
reads 1 minute
a school year
a school year
a school year



282,000 words

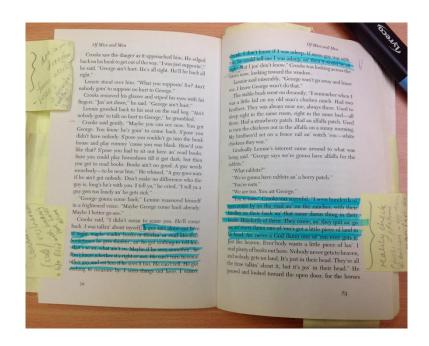
8,000 words

10th percentile

By the end of 6th grade Student "A" will have read the equivalent of 60 whole school days. Student "B" will have read only 12 school days. Which student would you expect to have a better vocabulary? Which student would you expect to be more successful in school...and in life?

(Nagy & Herman, 1987)

Active Readers





- Speak and engage in class
- Speak to the teacher
- Speak to others





Active listening





- Complexity
- Sophistication
- Mechanics
- Structure



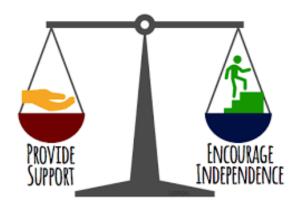
At home

- Encourage a growth mindset
- Challenge but don't rescue
- Focus on the learning over the work
- What questions did you ask today?
- What makes you say that?
- Support your child in arguing effectively and persuasively





- Accessing school resources
- Collaborating with classmates
- Asking teacher questions
- Acting on feedback
- Getting involved
- Taking responsibility for own learning



Study skills in Science

Dr Lauren Binge

Head of Science



In class:

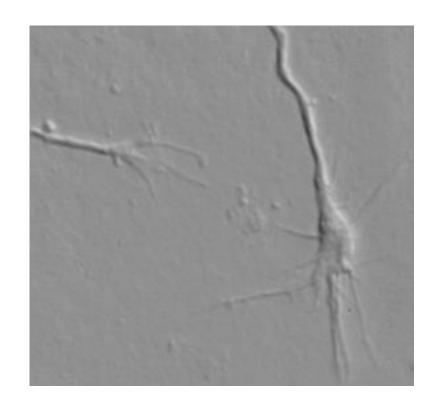
- Discover new concepts
- Each year (7-9) will experience some Biology,
 Chemistry and Physics
- Develop scientific inquiry skills curiosity
- Practice analytical skills



At home:

- Opportunity to review concepts
- Practice skills
- Develop good revision habits
- Focus on feedback (not the grade)
 - follow up on skills/concepts still unsure of from assessments

What learning looks like





Read over notes AND THEN

- List important points on a concept map
- Condense notes (use examples and non-examples)
 - Create a glossary of key terms

Try the worked examples from class again at home

- Cover, write, check
- Practice the skill by completing relevant worksheets/questions





Be clear where to find good resources:

- STL Link or SchoolBox Social Stream
- Science & technology publications, both traditional and web-based (ScienceDaily, Ars Technica, Science News for Students) – inspire curiosity and improve scientific literacy
- Get involved in all classroom activities & ask questions



Effective Study in Languages Other Than English Ms Elvira Cabellero



- Memorize the material before you start, then use it.
- Make lists per each topic. They can be organised alphabetically or in a visual format.
- Copy out a list of words in a different order, e.g. starting in the middle-often we learn the words at the beginning and end of lists more easily but tend to forget the ones in the middle.
- Vocabulary is as important as grammar: you can't have a proper sentence without either.





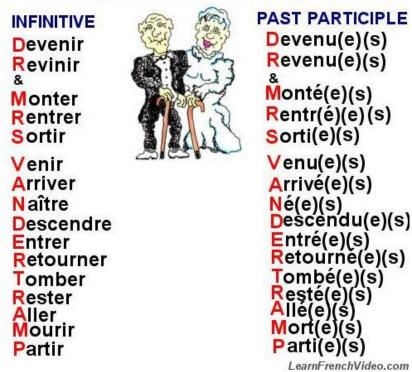
 Use mind maps to help you visualize word. If you are revising clothing vocabulary, you can write these words as though they are being worn by a stick figure.



- Type irregular verbs in an electronic verb table.
 Blank out parts of the verb and then see if you can remember the missing parts later.
- Use flashcards, Post It notes of different colors.
- Learn irregular adjectives and verbs in a phrase.
- Create sentences where you aim to use 4 new words in a logical manner.



Verbs Conjugated With Être In The Past Tense Mrs. & Dr. Vandertramp



 Use memory aids, mnemonics for example (each letter stands for a word or a concept).

MORE TIPS

- Decorate your bedroom, bathroom, fridge with your language notes!
- Everyone makes mistakes in a foreign language, that is how you learn. You need to go over the corrections of those mistakes.
- Watch films *in* the language, watch video clips *about* the language, listen to Podcasts.



 Associate the character with its meaning by using an image. Make connections to others.





- Play a word association game on a topic.
- Look, cover, write, check!
- Listen to audio files, songs, interviews, etc.
- Don't shy away from rote learning.









 Use different websites, Apps to revise. Remember that we have subscribed to Linguascope and Language Perfect for example.

FINALLY

- Talk, talk and talk some more!
- Read aloud!!
- Write and talk about you, your family, friends, what surrounds you!
- Don't wait until you have a test to study/learn.
- Know and use your resources.
- Be familiar with what you have.
- Don't be afraid to express yourself ... Just have a go!

