

Rationale

Resource

Pack

For use with the IB Programme.

Welcome to Rationale[™] Rigour



Austhink[™] is creating resources for IB Primary Years, Middle Years and Diploma Programmes.

Browse the following pages to see what we're doing...

This material has been developed independently of the International Baccalaureate, which in no way endorses it.



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1. Critical thinking exercises ideal for Middle Years Programme and Diploma Programme learners.

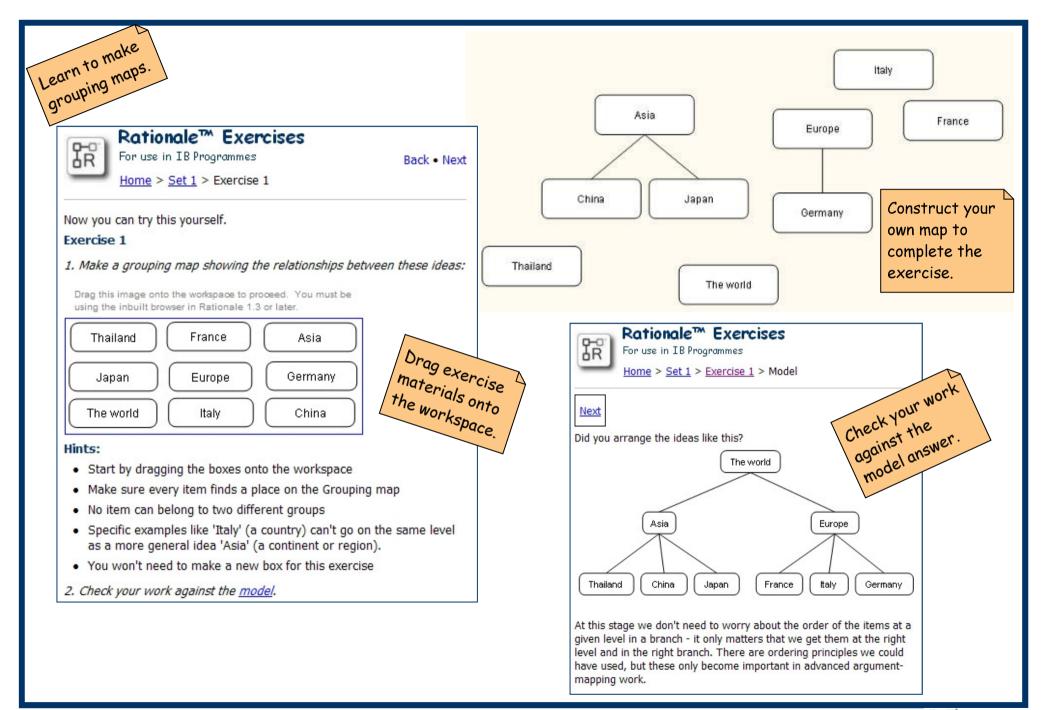


This set of exercises is designed to help IB learners develop skills in creating thinking maps using Rationale[™].

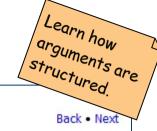
The exercise sets each take about 15 minutes. They are designed to scaffold learning and foster confidence by progressively building upon skills in easy steps.











Rationale™ Exercises R

Home > Set 5 > Exercise 4

For use in IB Programmes

Exercise 4

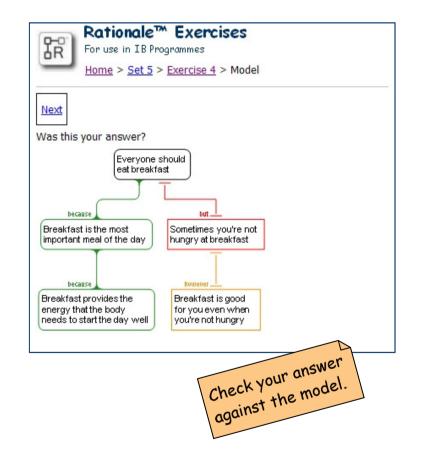
1. Make a Rationale Reasoning map representing the argument in the following text:

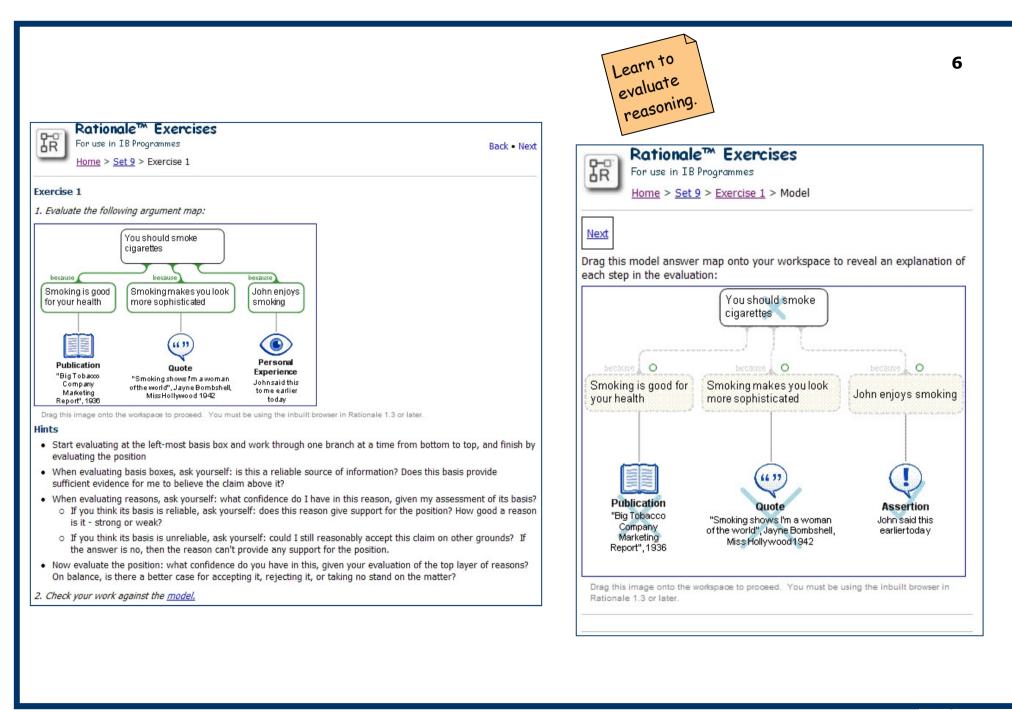
Everyone should eat breakfast. It is the most important meal of the day, since it provides you with the energy that the body needs to start the day well. But sometimes you're not hungry at breakfast, however it's nonetheless good for you even when you're not hungry.

Drag and drop sections of the above text onto the workspace to proceed. This works with any version of Rationale.

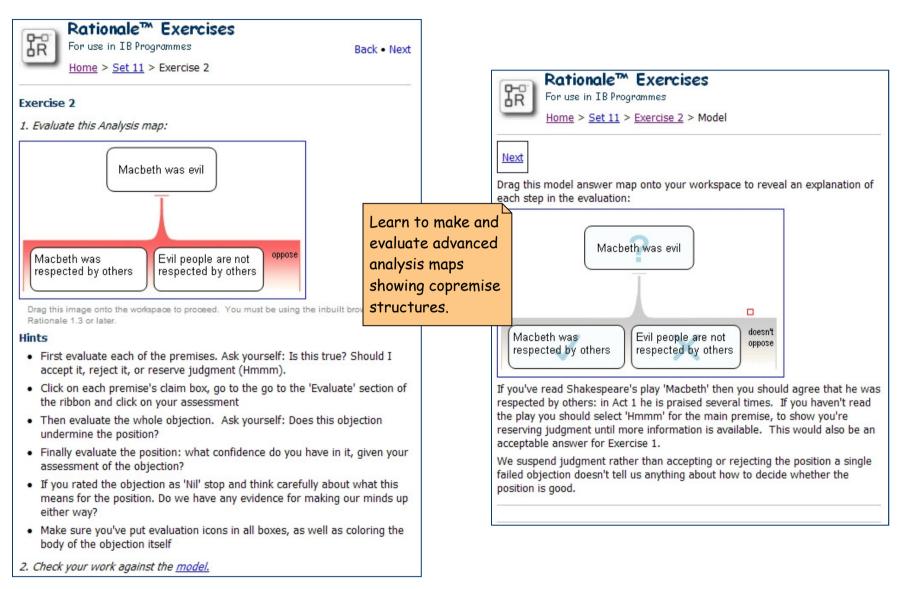
Hints

- · Refine all your claims by making them fully fleshed out, unambiguous declarative sentences
- Look for indicator words that reveal whether claims are positions, reasons, or objections
- · When you don't have indicators to give you clues, you'll need to work out the argument's logical structure by thinking about which claims give support to, or undermine, other claims, and which claim expresses the argumentative position (the main point at stake)
- · If you have trouble working out where to locate a reason, ask yourself: does this reason offer direct support for the position, or does it support some other claim?
- 2. Check your work against the model.



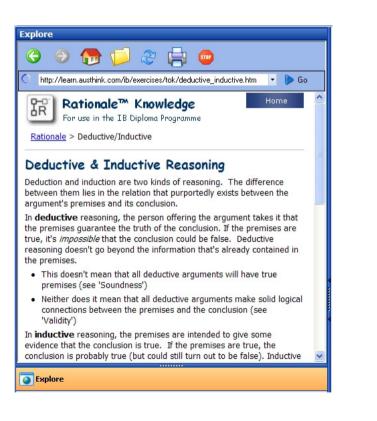








2. Theory of Knowledge resources for IB Diploma.



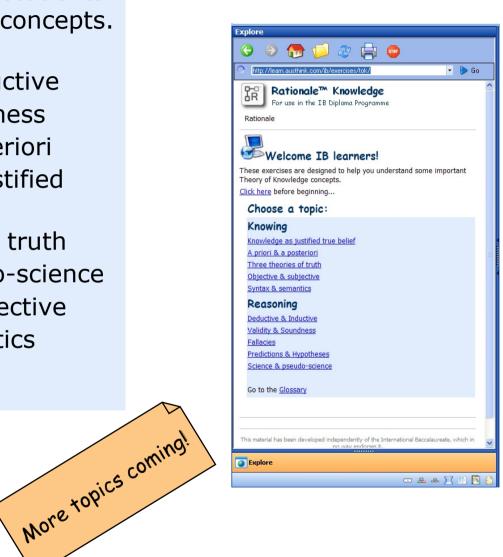
Our TOK resources include:

- Online exercises to practice key TOK concepts.
- TOK specific sample maps.
- Example maps and text that show how to use Rationale to plan a TOK essay.



Online exercises for students to practice TOK key concepts. Topics include:

- Deductive & Inductive
- Validity & Soundness
- A priori & a posteriori
- Knowledge as justified true belief
- Three theories of truth
- Science & pseudo-science
- Objective & Subjective
- Syntax & Semantics
- Fallacies







Deduction and induction are two kinds of reasoning. The difference between them lies in the relation that purportedly exists between the argument's premises and its conclusion.

In deductive reasoning, the person offering the argument takes it that the premises guarantee the truth of the conclusion. If the premises are true, it's impossible that the conclusion could be false. Deductive reasoning doesn't go beyond the information that's already contained in the premises.

- This doesn't mean that all deductive arguments will have true premises (see 'Soundness')
- Neither does it mean that all deductive arguments make solid logical connections between the premises and the conclusion (see 'Validity')

In **inductive** reasoning, the premises are intended to give some evidence that the conclusion is true. If the premises are true, the conclusion is probably true (but could still turn out to be false). Inductive reasoning purports to extend our knowledge, i.e., to draw a conclusion which goes beyond the information contained in the premises.

If your TOK text book offers a definition in terms of 'the general' and 'the particular' click here for an important note.

Let's try a practice exercise...

Sort the white boxes into two categories according to whether the arguments they contain are deductive or inductive:

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Practice exercises to complete on the workspace.

Drag this image onto the workspace to proceed. You must be using the inbuilt browser in Rationale 1.3 or later.

Check your work against the model answer. After you've finished this exercise drag this thumbnail onto the workspace to see the model answer:



Next

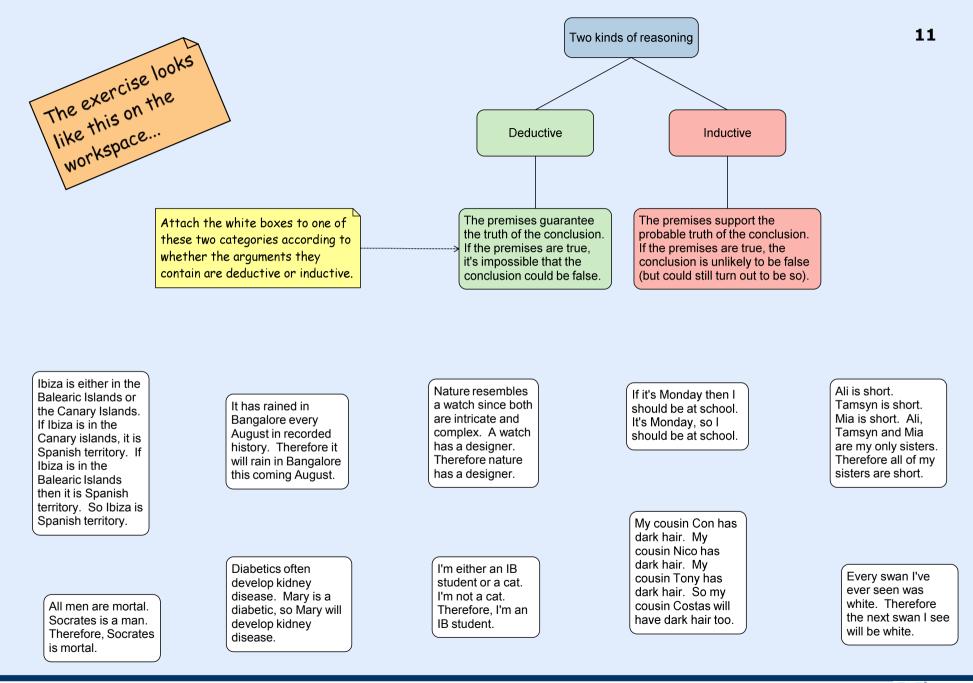
Exercises

run in Rationale's

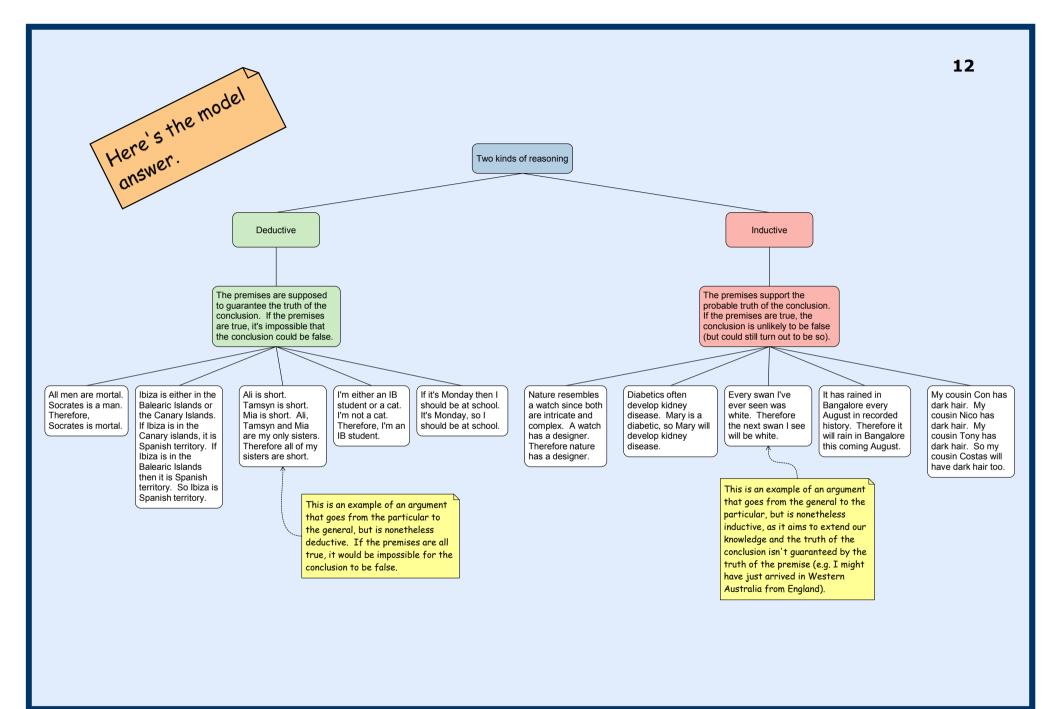
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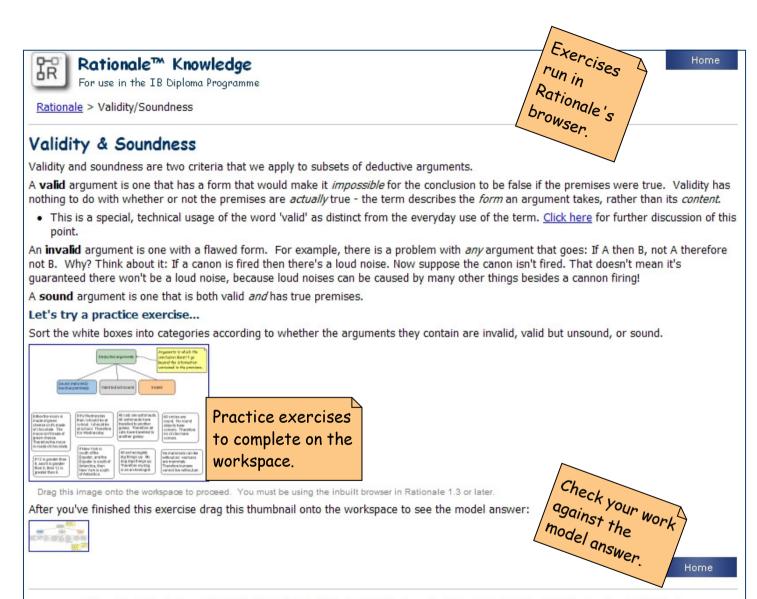
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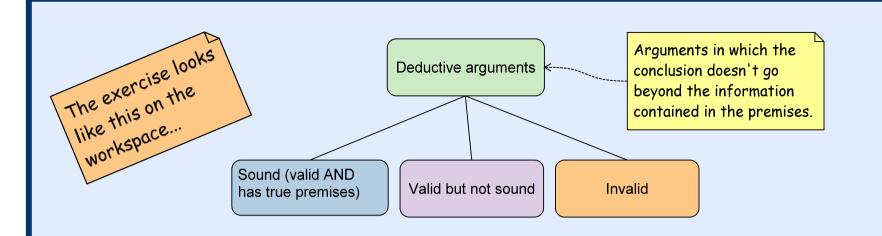
Rationale



Rationale



[Knowledge] [<u>A priori/a posteriori</u>] [<u>Truth</u>] [<u>Objective/Subjective</u>] [<u>Syntax/semantics</u>] [<u>Deductive/Inductive</u>] [<u>Validity/Soundness</u>] [<u>Fallacies</u>] [<u>Predictions & hypotheses</u>] [<u>Pseudo-science</u>]



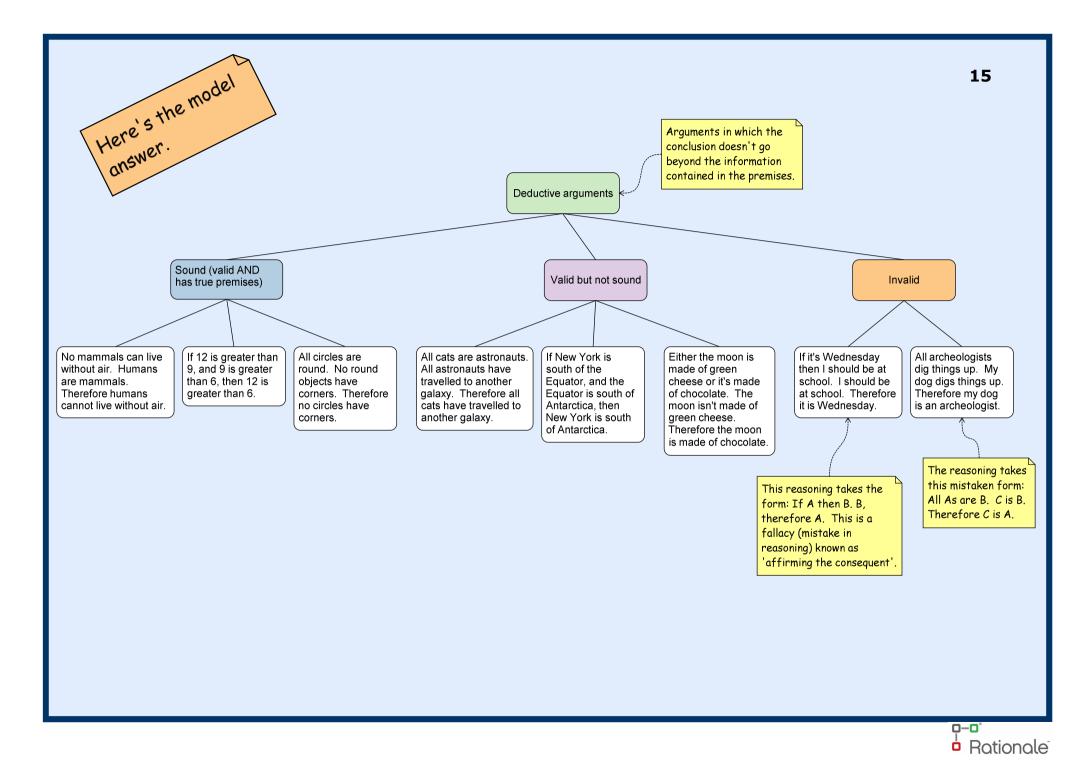
Either the moon is made of green cheese or it's made of chocolate. The moon isn't made of green cheese. Therefore the moon is made of chocolate.

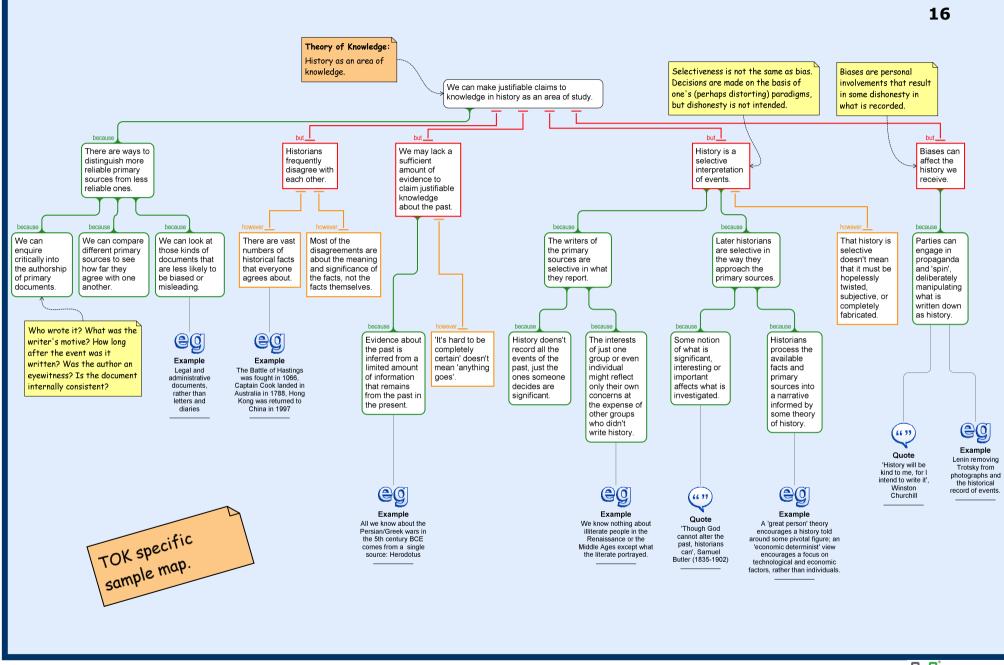
If 12 is greater than 9, and 9 is greater than 6, then 12 is greater than 6. If it's Wednesday then I should be at school. I should be at school. Therefore it is Wednesday.

If New York is south of the Equator, and the Equator is south of Antarctica, then New York is south of Antarctica. All cats are astronauts. All astronauts have travelled to another galaxy. Therefore all cats have travelled to another galaxy. All circles are round. No round objects have corners. Therefore no circles have corners.

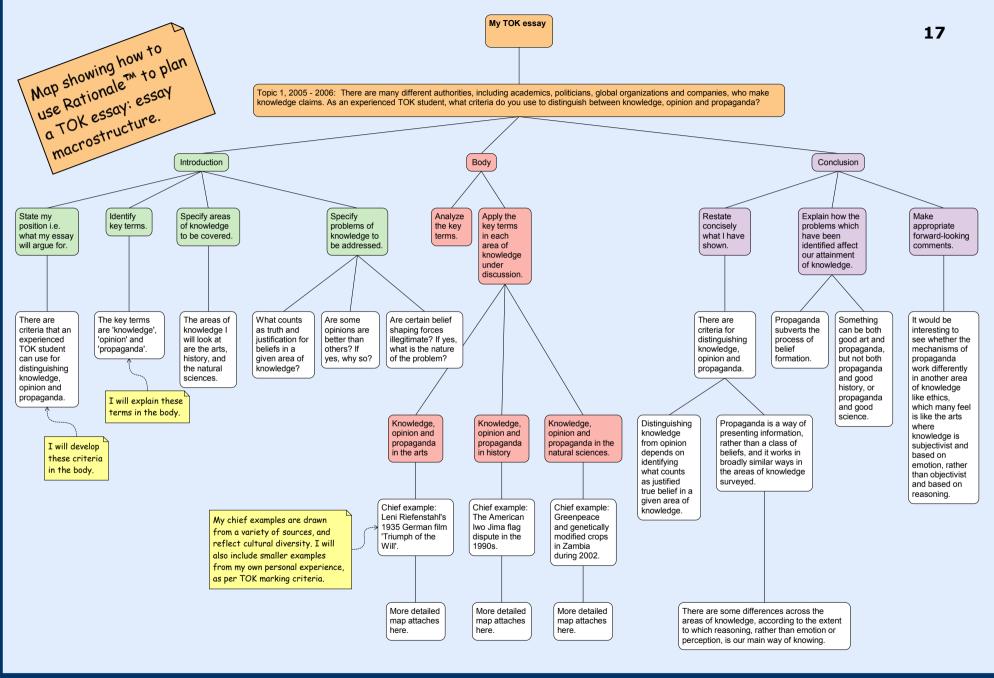
All archeologists dig things up. My dog digs things up. Therefore my dog is an archeologist. No mammals can live without air. Humans are mammals. Therefore humans cannot live without air.



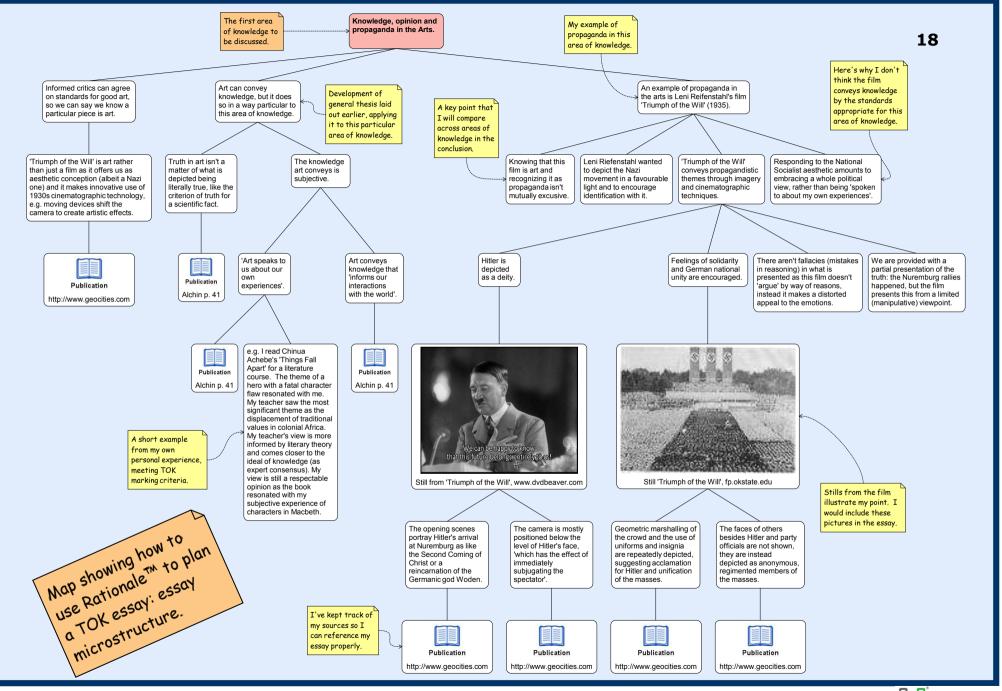




Rationale



• Rationale



Rationale

Knowledge, opinion and propaganda in the Arts (essay fragment)

Informed critics can agree on standards for good art, so we can say we know a particular piece is art. For example, Leni Riefenstahl's 'Triumph of the Will' (1935) is art rather than just a film as critics agree that it offers an aesthetic conception (albeit a Nazi one), and it makes innovative use of 1930s cinematographic technology, e.g. moving devices shift the camera to create artistic effects.¹

Art can also convey knowledge, but it does so in a way particular to this area of knowledge. Truth in art isn't a matter of what is depicted being literally true, like the criterion of truth for a scientific fact.² Alchin says that the knowledge art conveys is subjective rather than objective, as art 'speaks to us about our own experiences'.³ I think he is correct, based on an experience I had while reading Chinua Achebe's *Things Fall Apart* for a literature course. The theme of a hero with a fatal character flaw resonated with me. My teacher saw the most significant theme as the displacement of traditional values in colonial Africa. My teacher's view is more informed by literary theory and comes closer to the ideal of knowledge (as expert consensus). My view is still a respectable opinion as the book resonated with my subjective experience of characters in Macbeth.

Alchin also suggests that art conveys knowledge that 'informs our interactions with the world'.⁴ He means that the aesthetic experiences I have shape what I feel, think and go on to do. This is important when it comes to the question of propaganda, where the 'shaping' is illegitimate. 'Triumph of the Will', which I mentioned earlier, is an example of propaganda in the arts. Knowing that this film is art and recognizing it as propaganda isn't mutually excusive.

Leni Riefenstahl wanted to depict the Nazi movement in a favourable light and to encourage identification with it. Her film uses imagery and cinematographic techniques to convey propagandistic themes. Firstly, Hitler is depicted as a deity. The film's opening scenes portray Hitler's arrival at Nuremburg as like

the Second Coming of Christ or a reincarnation of the Germanic god Woden. In addition, the camera is mostly positioned below the level of Hitler's face, 'which has the effect of immediately subjugating the spectator'.⁵

Secondly, the film encourages feelings of solidarity and German national unity. The geometric marshalling of the crowd and the use of uniforms and insignia are repeatedly depicted, suggesting acclamation for Hitler and unification of the masses.⁶ Furthermore, the faces of others besides Hitler and party officials are not shown, they are instead depicted as anonymous, regimented members of the masses.⁷





Stills from 'Triumph of the Will'.⁸

There aren't fallacies (mistakes in reasoning) in what is presented, as this film doesn't 'argue' by way of reasons, instead it makes a distorted appeal to the emotions. Another factor typical of propaganda is that we are provided with a partial presentation of the truth: the Nuremburg rallies happened, but the film presents this from a limited (and manipulative) viewpoint. Responding to the National Socialist aesthetic depicted amounts to embracing a whole political view, rather than being 'spoken to about my own experiences', so this film doesn't convey knowledge by the standards appropriate for this area of knowledge.

⁸ Hitler picture, http://www.dvdbeaver.com, Nuremburg rally picture http://www.fp.okstate.edu, both accessed 4/7/07.

Essay text follows map structure.



¹ 'To what extent are the labels of "propaganda" and "art" appropriate in the description of Leni Riefenstahl's Triumph des Willens (1935)', Edmund Butcher, http:// www.geocities.com/ ebutcher1/?200727, accessed 4/7/07.

² N. Alchin, *Theory of Knowledge*, John Murray Publishers, London, 2003, p. 41.

³ Alchin, p. 41.

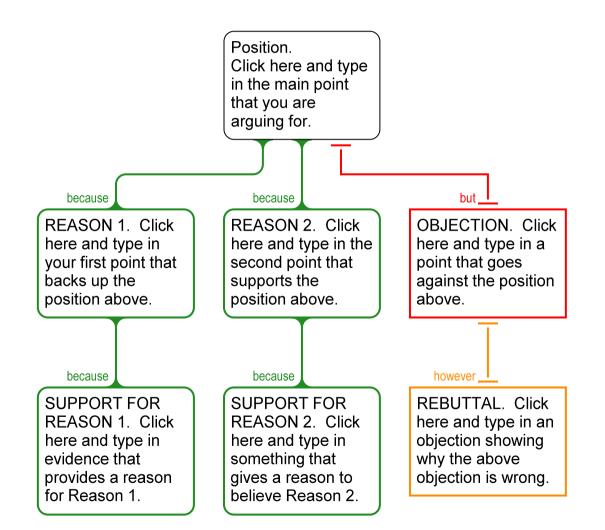
⁴ Alchin, p. 41.

⁵ http://www.geocities.com

⁶ http://www.geocities.com

⁷ http://www.geocities.com

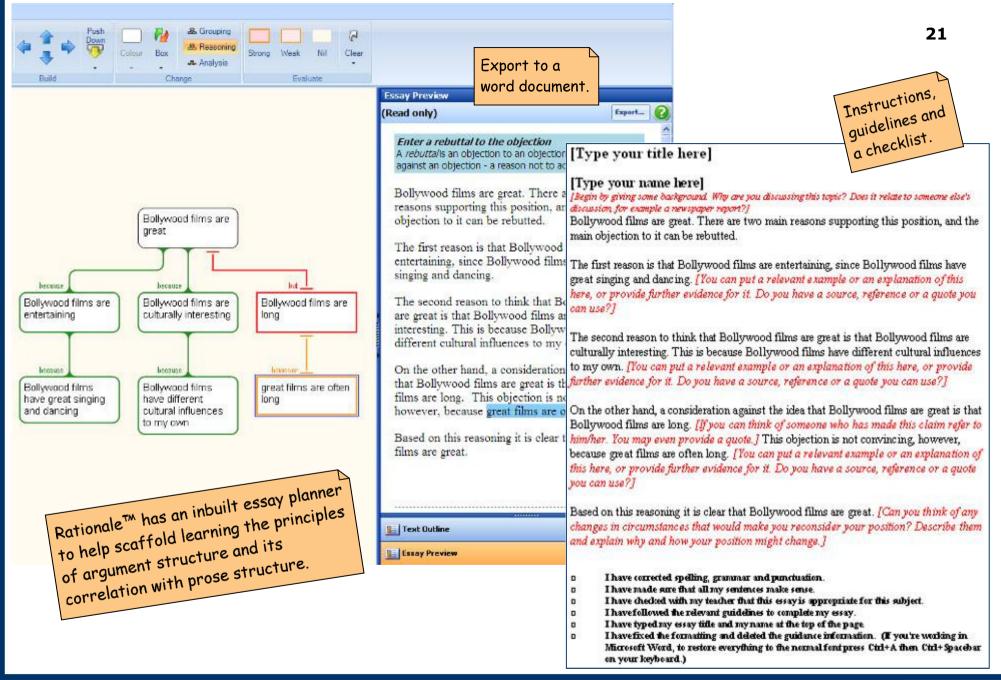
3. Essay planning resources for Primary and Middle Years Programmes.



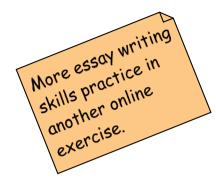
Essay writing is frequently difficult for students and oftentimes a great chore for teachers to assess. The problems are often a lack of coherence, poor structure and information without a point.

Rationale's essay planner templates provide guided instruction for structured arguments and meaningful prose.









Rationale™ Exercises

For use in IB Programmes

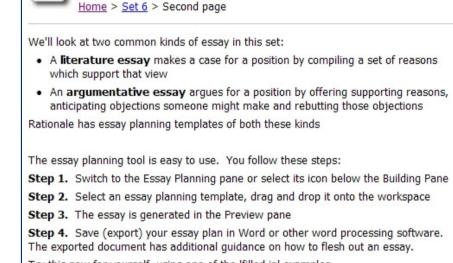
Home > <u>Set 6</u> > Set 6 - Essays

Set 6 - Essays

R

Rationale[™] has an inbuilt essay planner. This tool can help you learn how to write well structured essays that express your ideas clearly.

Skills Represent an argument clearly in essay form. Key concepts Signposting Indicators Introduction Body Conclusion Essay Planning



Try this now for yourself, using one of the 'filled in' examples

Rationale[™] Exercises

For use in IB Programmes

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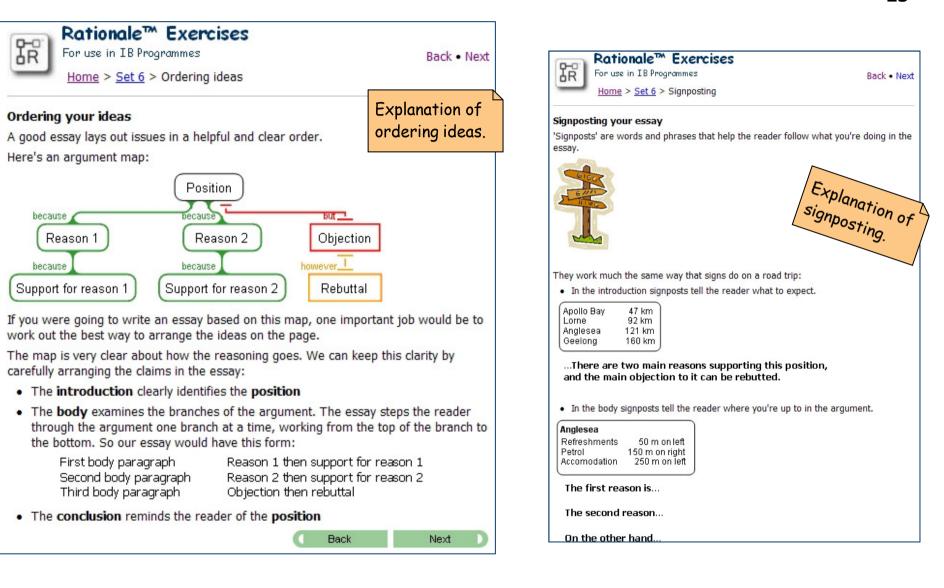
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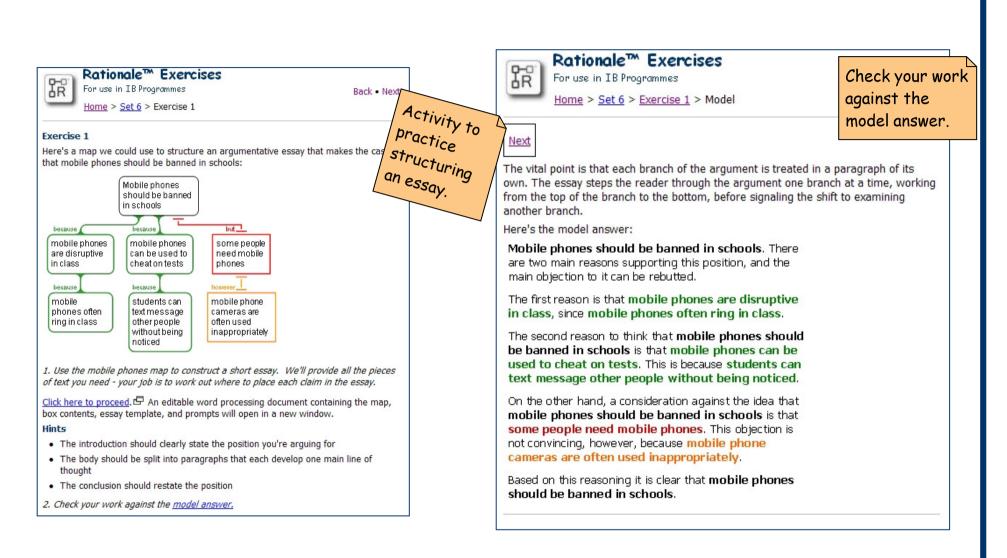
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Rationale









4. Extended Essay resources for Diploma Programme.



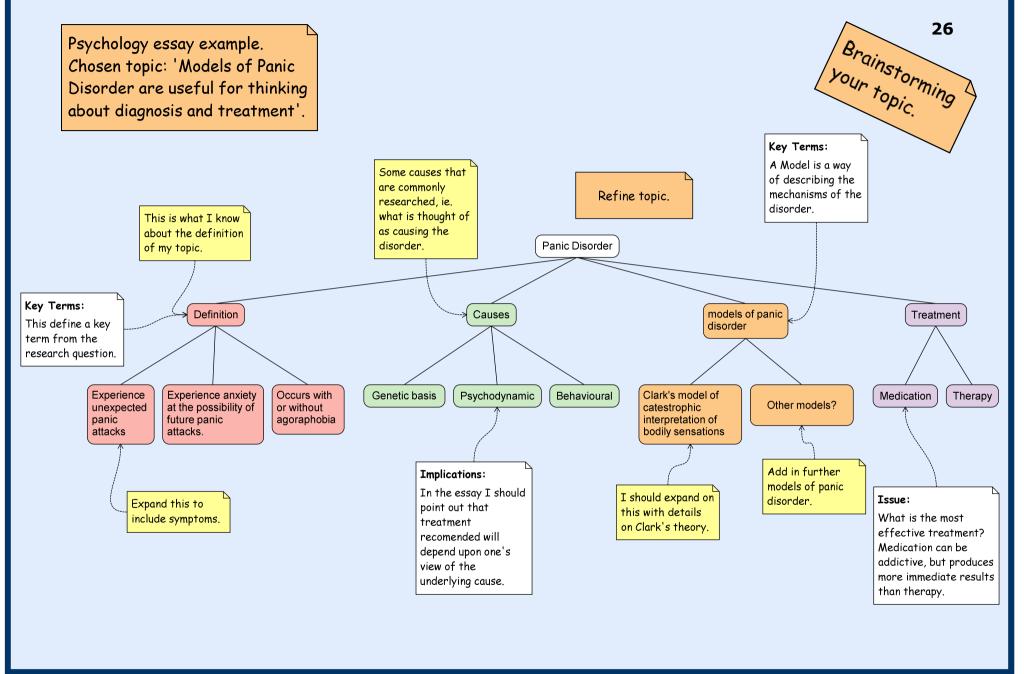
Writing a 4000 word essay is daunting for anyone!

In what is probably their first major piece of writing, IB Diploma learners are likely to require assistance in:

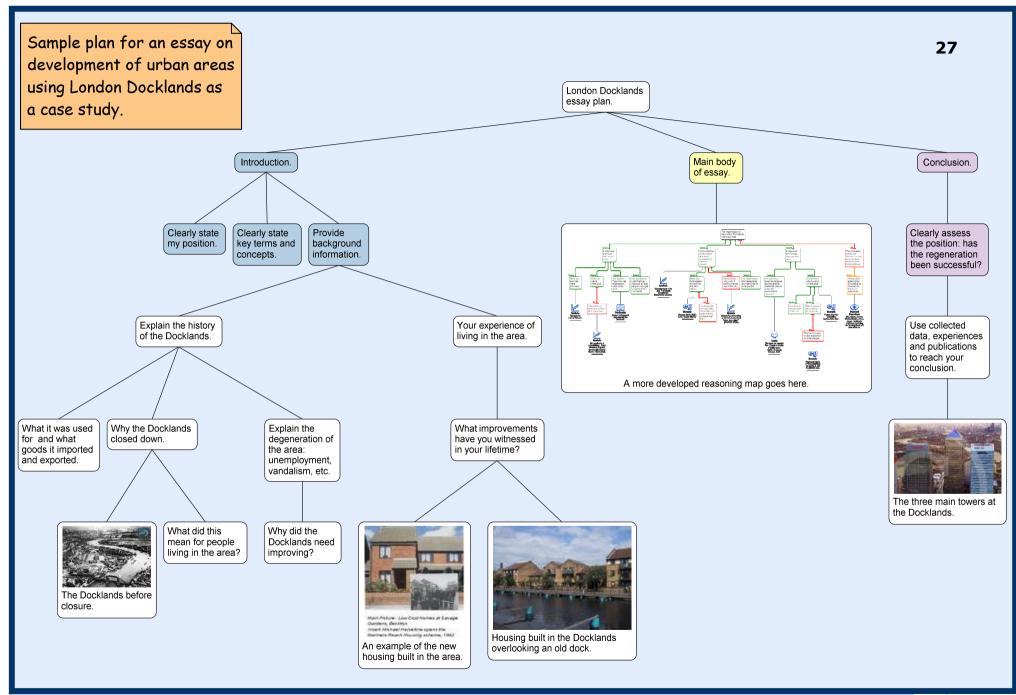
- Organising their ideas and research
- Identifying perspectives and evidence
- Developing a clear argumentative contention
- Providing a solid essay structure

To help with this, Austhink is developing an IB guide booklet for students, 'Writing your Extended Essay with Rationale[™]', in collaboration with Geelong Grammar

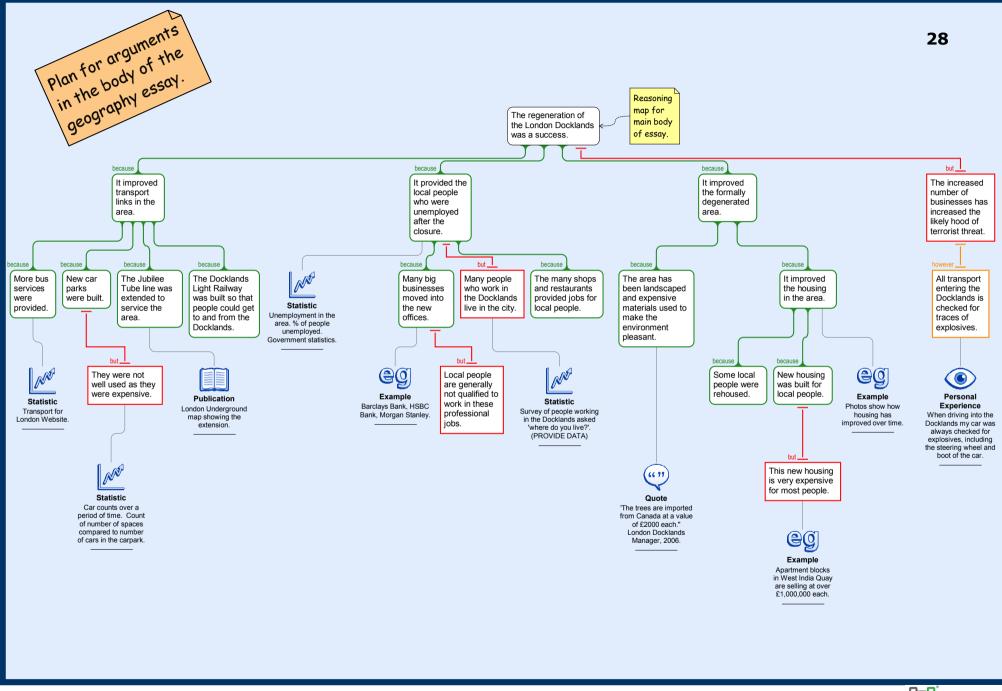




Rationale[®]







Rationale[®]

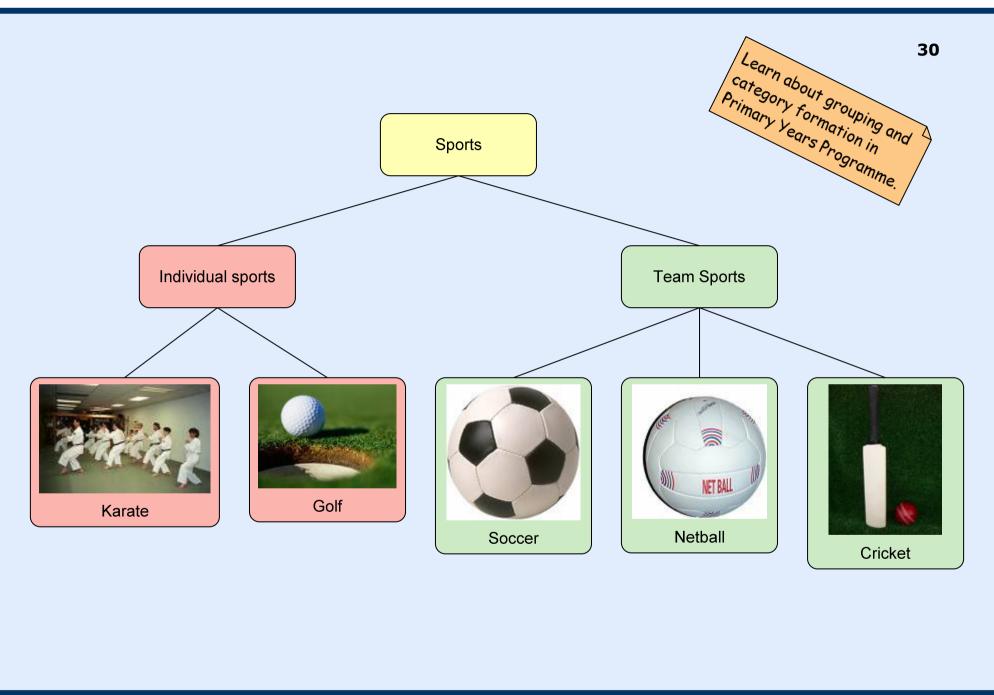
5. IB Sample Maps.



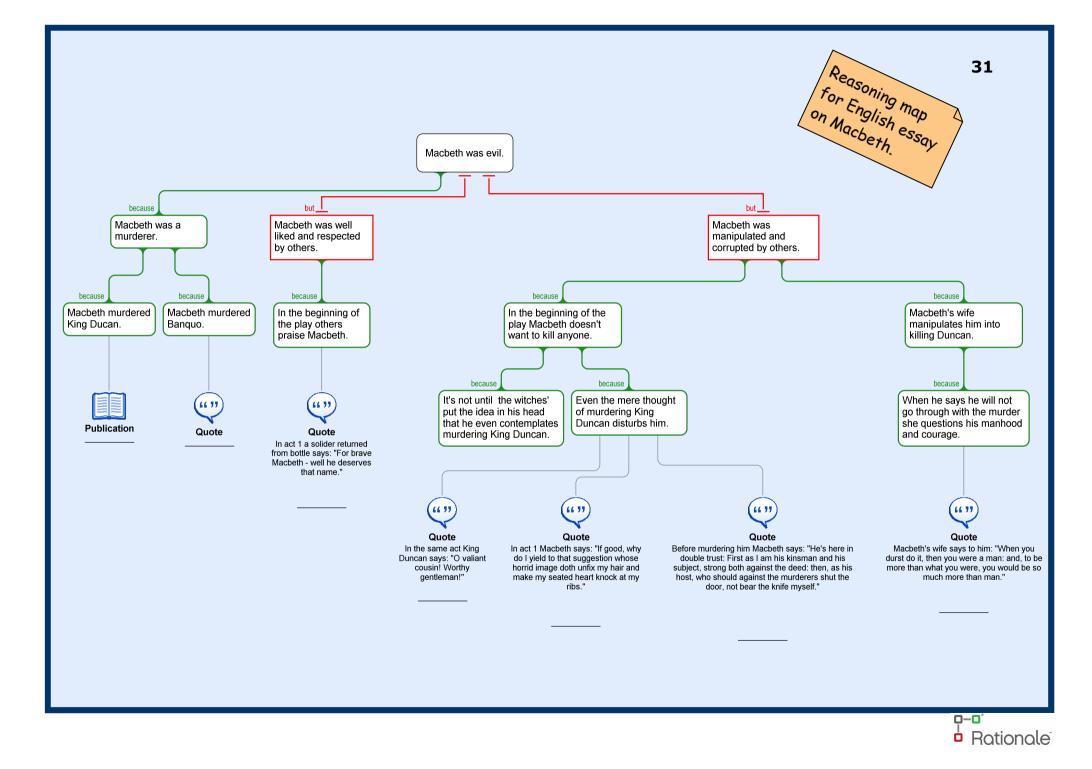
Sometimes its useful to see map examples to appreciate how argument mapping will look in your classroom.

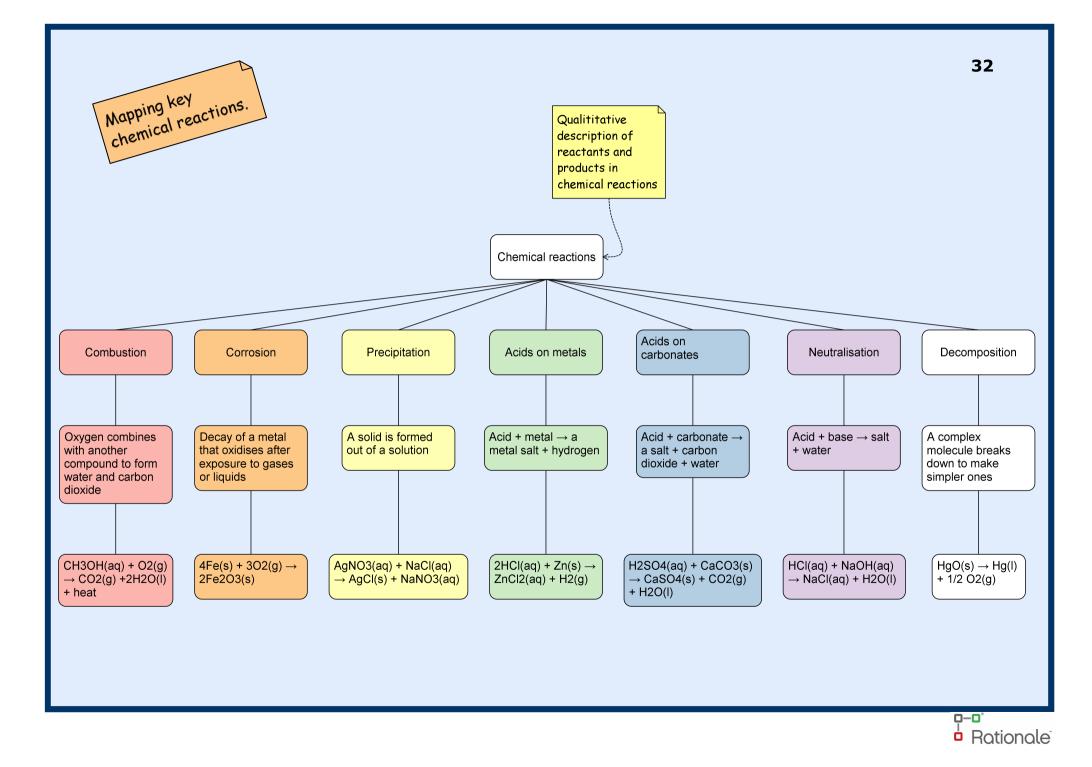
Here are some maps to get you thinking...

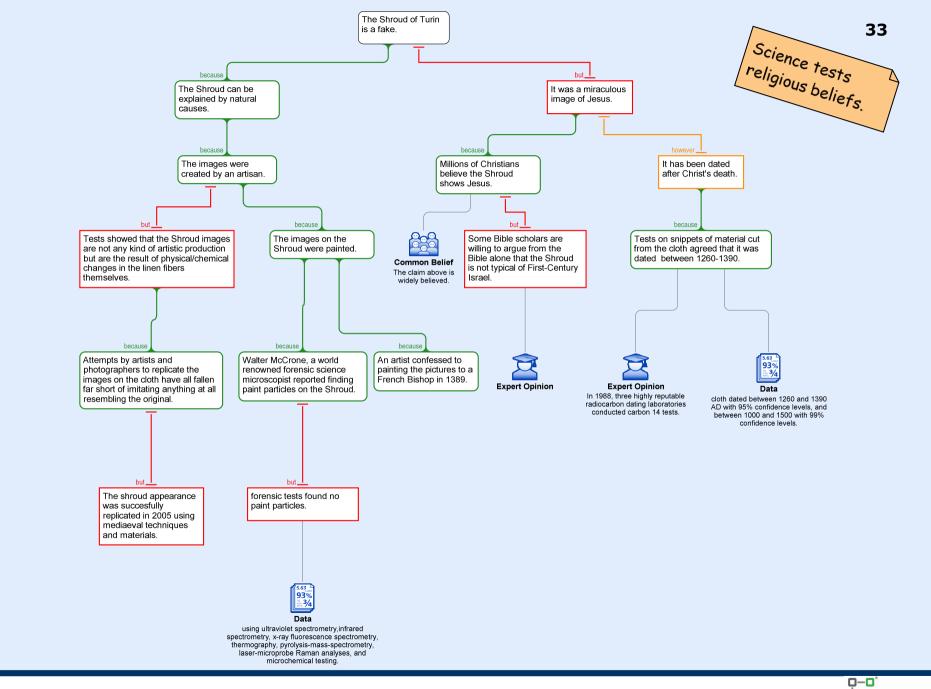


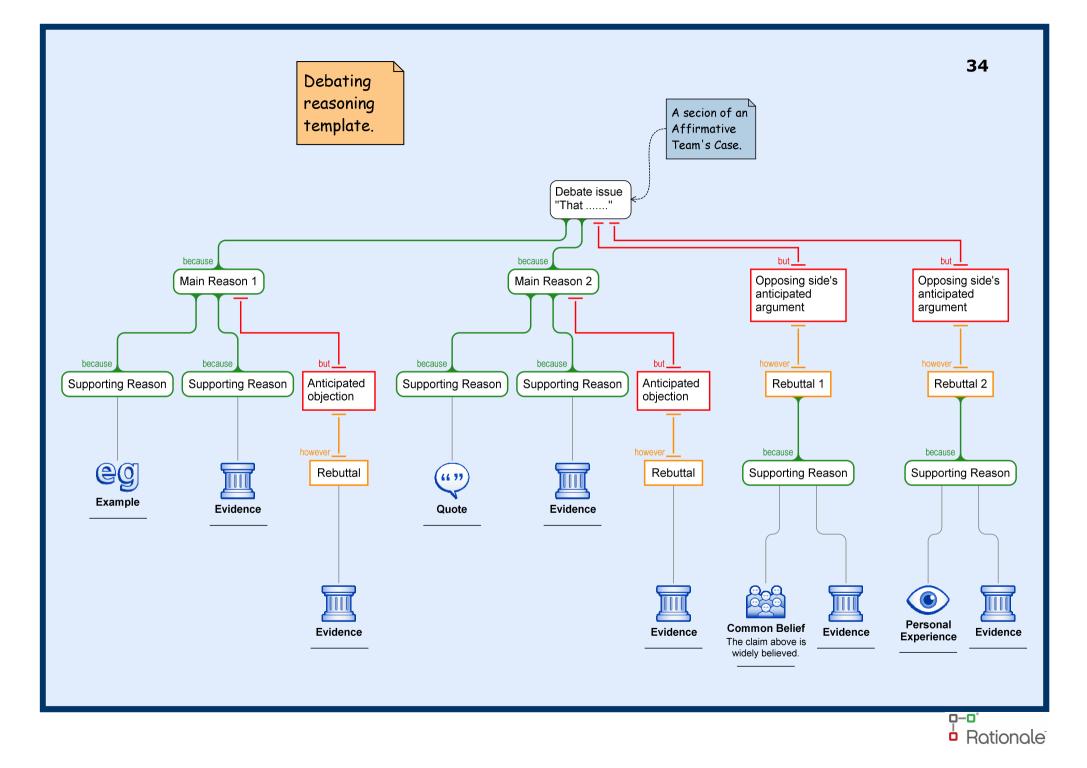


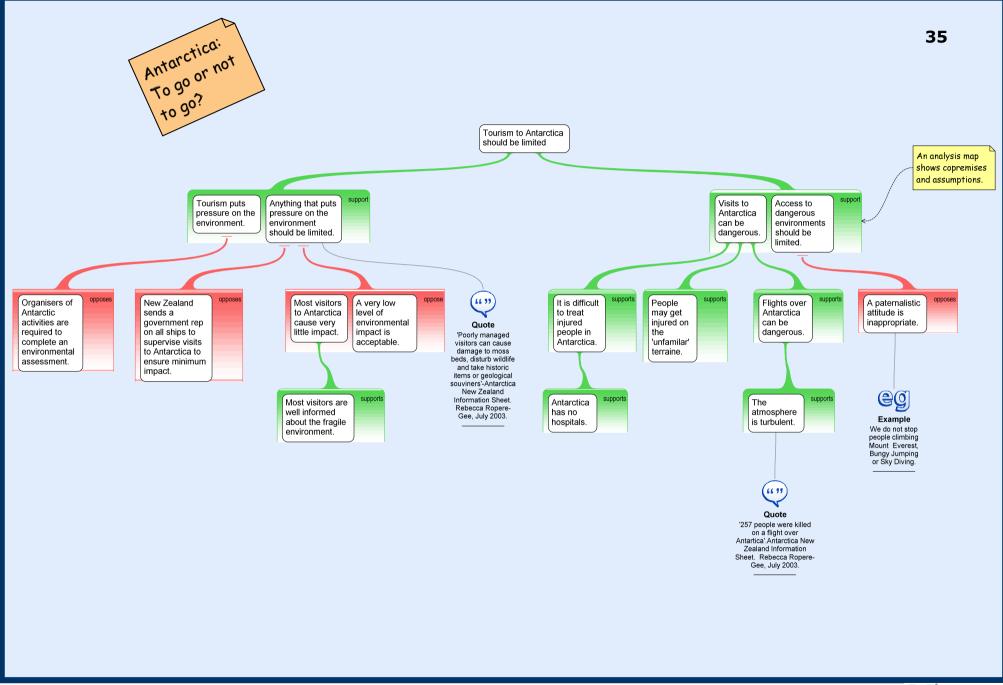












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