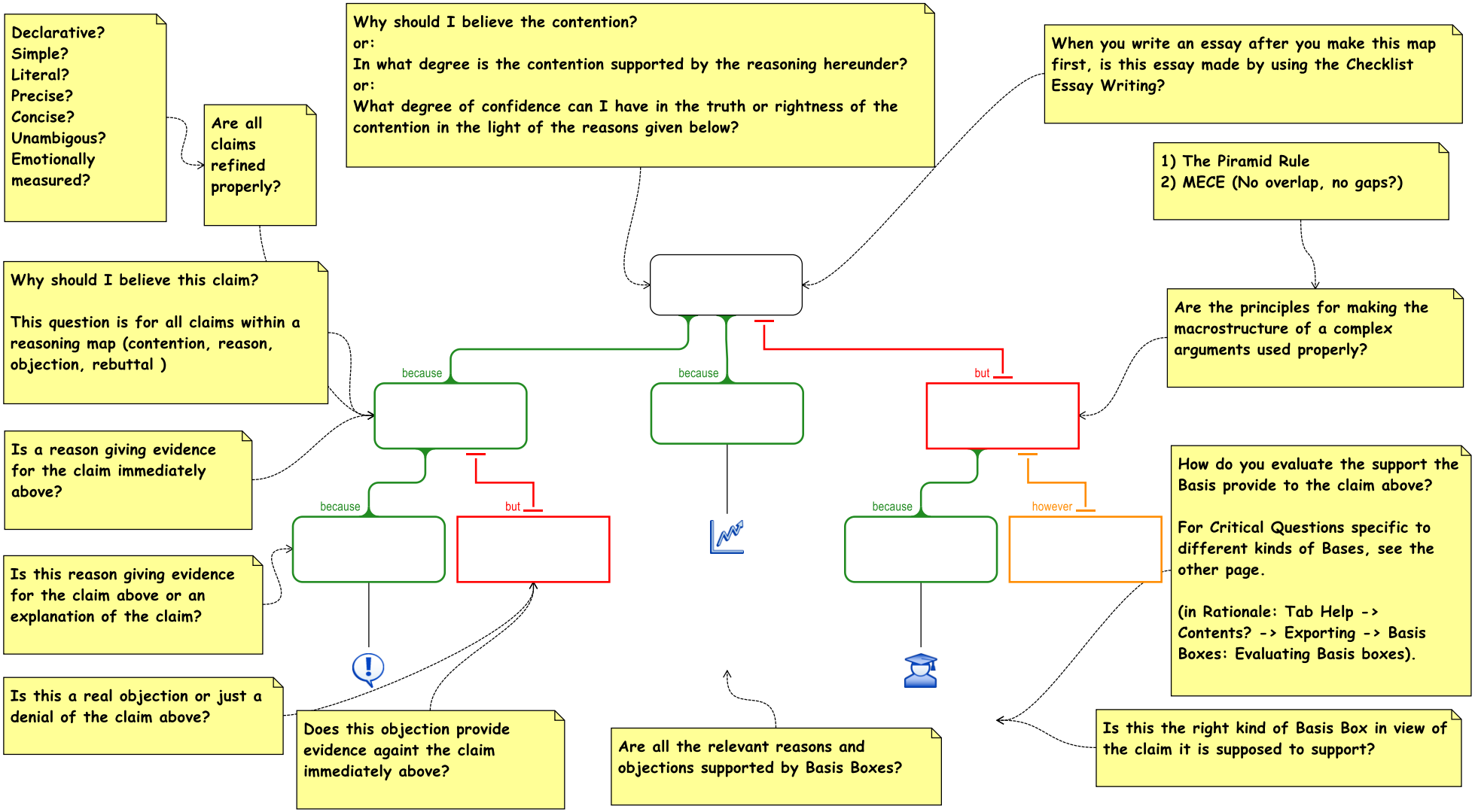
Hand-out Critical Questions for Reasoning Maps I



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Assertion
How reliable is the person who made this claim?

- Could that person be mistaken in some way?
  - Could they be misremembering?
  - Are they in a position to know?
- Is that person impartial? Could they have a reason to lie or misrepresent information?
- How reliable is that person?

Is the claim something that could count as knowledge, or is it merely someone's personal opinion?

By Definition

- Is the definition clear?
- Does everyone agree with this definition?
- Could two people mean something different by these expressions?

Case Study

- Is the case study relevant?
- Does the case study provide a good basis or analogy for the claim?
- Do the results of the case study concur with the claim being made?

Common Belief

- Is this belief true or is it just a popular opinion, common misunderstanding or stereotype?
- Is this belief really held widely across the whole population?
- Is this belief well founded?
- Is this belief free of serious dispute?
- If the claim is a common generalization, is it true or acceptable in this instance?

Data
How reliable are the data?

- How likely is it that the data could contain errors?
- Could the data have been tampered with?
- Were the data collected using a reliable and appropriate research method?
- Are the data relevant, and do they really support the claim?

Event

- Is the event relevant?
- Who reported the event and are they reliable?
- Does the event support the claim or provide an appropriate analogy?

Example

- How relevant is the example?
- Is one example sufficient to establish the claim? (Sometimes a single example is enough to establish a claim; at other times it isn't.)

Expert Opinion

- Is the expert
  - a genuine expert in an area relevant to the claim (i.e. do other experts recognize his or her expertise)?
  - sincere?
  - trustworthy and disinterested (i.e. free of conflicts of interest)?
  - in a reasonable position to make this claim (e.g. if the claim is a prediction or hypothesis)?
  - justifiably confident of the truth of this claim?
- Is the claim seriously disputed by other experts in the field?

Law

- Is this Act or precedent relevant to the claim?
- Has the law been superseded?
- Do the details of the claim in question match the requirements of the law?

Media

- Is this media report reliable?
- Has the media report been manipulated in some way, for example, propaganda or commercial interest?
- Is the media form a genuine information source or does it provide mere gossip and innuendo?
- Does the media information provide a balanced view?

Publication
How reliable is this publication?

- How respected or respectable is the author in the relevant field?
- How respected or respectable is the publisher?
- If the publication is on the internet, is it made available on a reliable institution's website?
- If the publication is a journal, is it refereed or is everyone accepted for publication?
- How recent is the publication? Could the information be out of date?

Quote

- Is this quote genuine, or is the person being misquoted or quoted out of context?
- Is the quote relevant to the claim above it?
- Does the quote really support (e.g. substantiate or illustrate) the claim?

Remember that when you are evaluating a quote as a basis for a claim, you are not just saying, for example, "It's true that this quote was made by Shakespeare in Macbeth"; rather you are saying, "This quote provides solid/shaky/nil support for the claim above".

Statistic
How reliable is the statistical evidence?

- Are the statistics based on reliable data?
- Was the sample used for the statistics sufficiently large and representative of the population about which it generalizes?
- Are the statistics recent?
- Are there other statistics in this area that show very different results?
- Does the statistic come from a trustworthy, objective, unbiased and disinterested source (i.e. where there is no conflict of interests)? (E.g. who financed the study and why?)
- How big is the leap from the analysis of the data to the conclusion or findings?
  - Does the interpretation of the data rely on questionable assumptions?
  - If the claim is about a causal link, is there evidence of causation or merely correlation?

Web Resource

- Does the website provide reliable information for the claim being made? (Think about whether it is a .com, .edu or .org address).
- Who operates this website? Are they a credible source?
- Does this website provide balanced views or only one view?

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