The Elements of Critical Thinking

The Elements of Thought

- Point of View
  - frame of reference, perspective, orientation, world view
- Purpose
  - goal, objective, function
- Question at Issue
  - problem, issue
- Information
  - data, facts, evidence, observations, experiences, reasons
- Interpretation and Inference
  - conclusions, solutions
- Concepts
  - theories, definitions, laws, principles, models
- Assumptions
  - presuppositions, axioms, taking for granted
- Implications and Consequences
  - that which follows logically, effects

Used With Sensitivity to Universal Intellectual Standards

Clarity → Accuracy → Depth → Breadth → Significance

Precision

Relevance

Source: www.criticalthinking.org
Questions Using the Elements of Thought

PURPOSE:
- What am I trying to accomplish?
- What is my central aim? My purpose?

INFORMATION:
- What information am I using in coming to that conclusion?
- What experience have I had to support this claim?

INFERENCEs and CONCLUSIONS
- How did I reach this conclusion?
- Is there another way to interpret the information?

CONCEPTS
- What is the main idea here?
- Could I explain this idea?

ASSUMPTIONS
- What am I taking for granted?
- What assumption has led me to that conclusion?

IMPLICATIONS AND CONSEQUENCES
- If someone accepted my position, what would be the implications? What am I implying?

POINTS OF VIEW
- From what point of view am I looking at this issue?
- Is there another point of view I should consider?

QUESTIONS
- What question am I raising?
- What question am I addressing?

Source: www.criticalthinking.org
Universal Intellectual Standards of Critical Thinking

| Clarity                  | Could you elaborate further?  
|                         | Could you give me an example?  
|                         | Could you illustrate what you mean?  
| Accuracy                | How could we check on that?  
|                         | How could we find out if that is true?  
|                         | How could we verify or test that?  
| Precision               | Could you be more specific?  
|                         | Could you give me more details?  
|                         | Could you be more exact?  
| Relevance               | How does that relate to the problem?  
|                         | How does that bear on the question?  
|                         | How does that help us with the issue?  
| Depth                   | What factors make this a difficult problem?  
|                         | What are some of the complexities of this question?  
|                         | What are some of the difficulties we need to deal with?  
| Breadth                 | Do we need to look at this from another perspective?  
|                         | Do we need to consider another point of view?  
|                         | Do we need to look at this in other ways?  
| Logic                   | Does all this make sense together?  
|                         | Does your first paragraph fit in with your last?  
|                         | Does what you say follow from the evidence?  
| Significance            | Is this the most important problem to consider?  
|                         | Is this the central idea to focus on?  
|                         | Which of these facts are most important?  
| Fairness                | Do I have any vested interest in this issue?  
|                         | Am I sympathetically representing the view points of others?  

Source: [www.criticalthinking.org](http://www.criticalthinking.org)
Intellectual Traits or Virtues of Critical Thinking

Source: www.criticalthinking.org
The Critical Thinking Flow Chart

Source: www.criticalthinking.org