

Critical Thinking Skills

Study Skills





Critical Thinking

What's Critical Thinking?

- *"Study without reflection is a waste of time; reflection without study is dangerous."*
-- Confucius

I'm NOT
a parrot



What does “critical thinking” really mean?

What does that term mean to you?

What does “critical thinking” really mean?

“Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.”

Source:

Scriven & Paul, 8th Annual International
Conference on Critical Thinking and
Education Reform, 1987

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Critical thinking begins when you question beyond what is given.

You want to know more:

- how something happens,
- why it happens, and further
- what will happen if something changes.

Critical thinking therefore requires a conscious level of processing, analysis, creation and evaluation of possible outcomes, and reflection.

If you're a critical thinker, you think.

....No surprise....

You are willing to examine your beliefs, assumptions, and opinions and weigh them against facts. You are willing to evaluate the generalizations and stereotypes you have created and are open to change, if necessary.



Critical thinkers listen carefully.

If you're a critical thinker, you listen carefully to what others are saying and are able to give feedback. You are able to suspend judgment until all the facts have been gathered and considered.

Critical thinkers look for evidence....

If you're a critical thinker, you look for evidence to support your assumptions and beliefs. You examine problems closely and are able to reject information that is incorrect or irrelevant.

Therefore...through experience, as a critical thinker, you will:

- identify information that is being put forth as an argument and break it down to its basic components for evaluation.
- construct alternative interpretations
- be willing to explore diverse perspectives
- be willing to change personal assumptions when presented with valid information
- be willing to ask difficult questions and the ability to be receptive to opposing viewpoints.

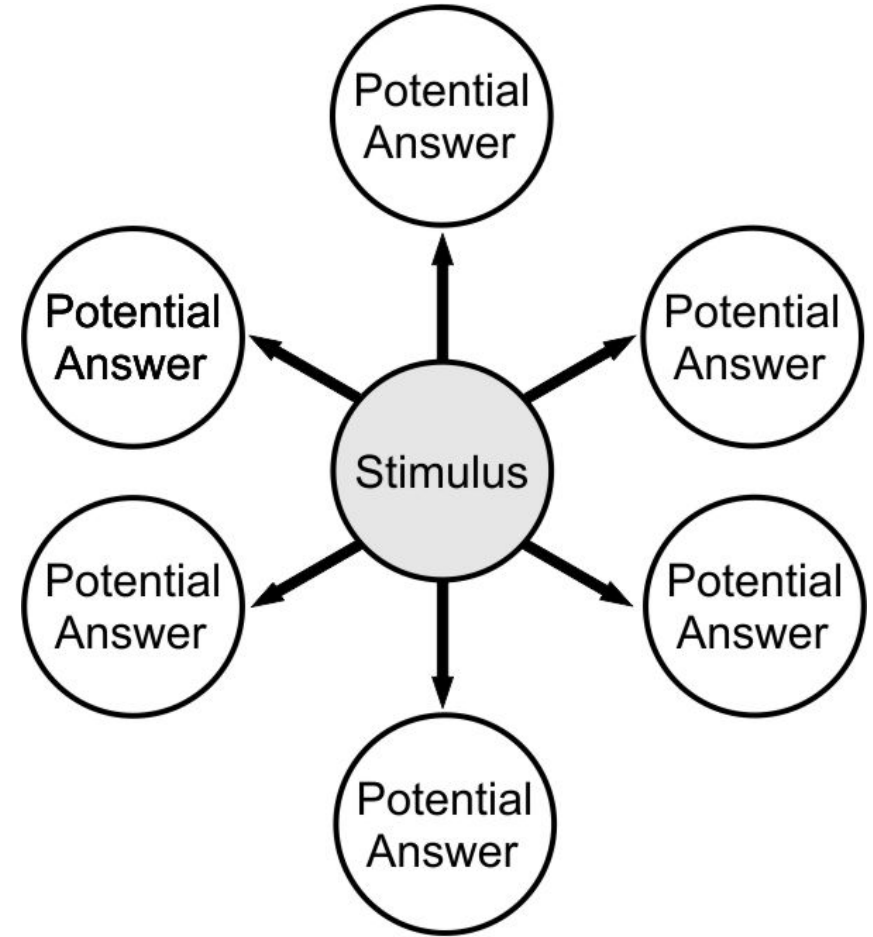
Critical thinkers are curious.

They are interested in knowing all there is about a topic. They look for new and better ways to do everything. They are not the person who will settle for “...because that is the way we have always done it.”

Definitions

Critical thinking is . . .

- Thinking “outside” the box
- Divergent thinking
- Forming logical inferences
- Limitless thinking
- Higher level thinking involving. . .



DIVERGENT THINKING

Evaluating

Analyzing

Synthesizing

Forming opinions


Assessing

Rating

Making inferences

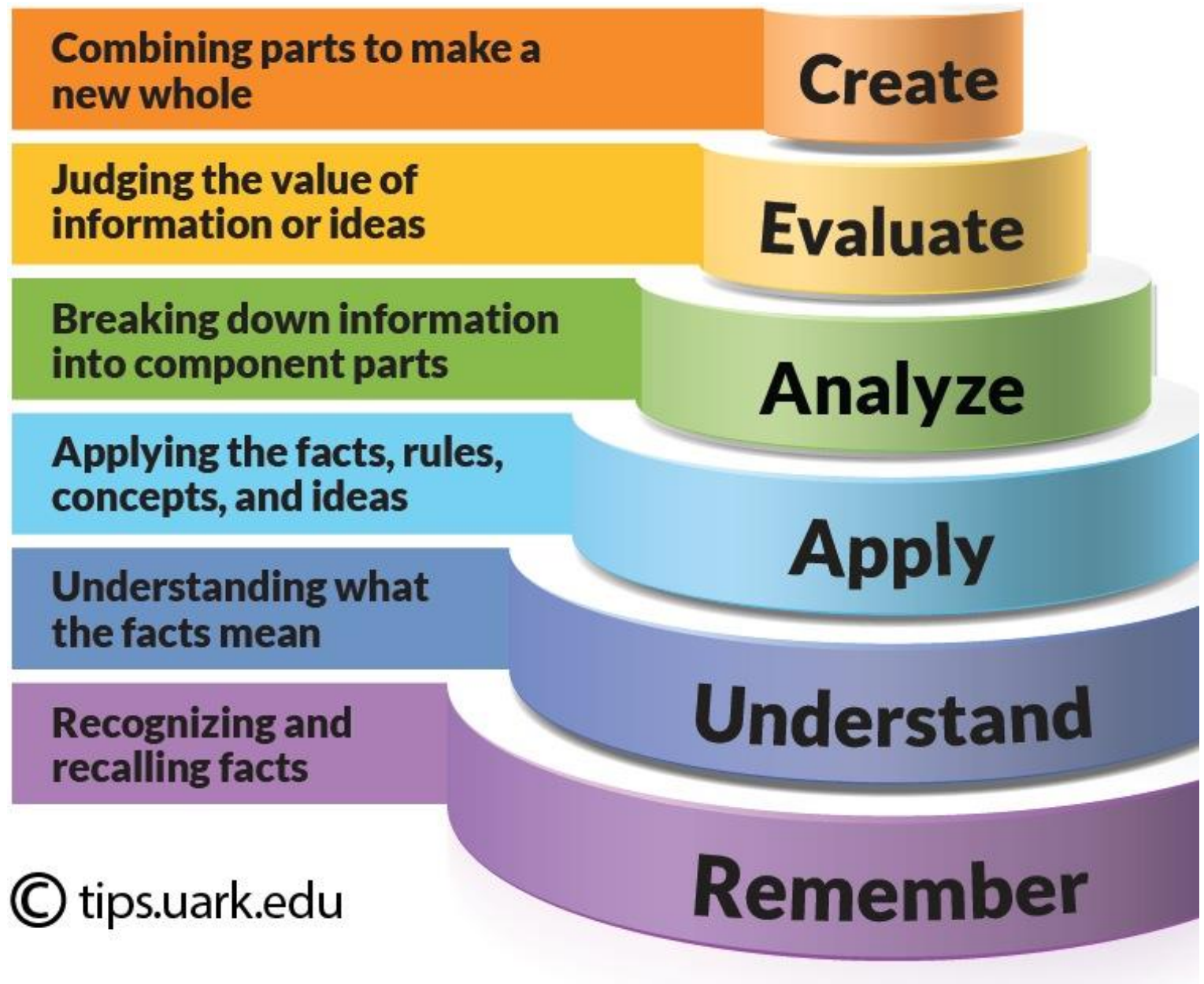
Drawing conclusions

Critiquing



**Higher level
thinking**

BLOOM'S TAXONOMY— A HIERARCHICAL CLASSIFICATION OF THE LEVELS OF THINKING



Understanding Bloom's Taxonomy

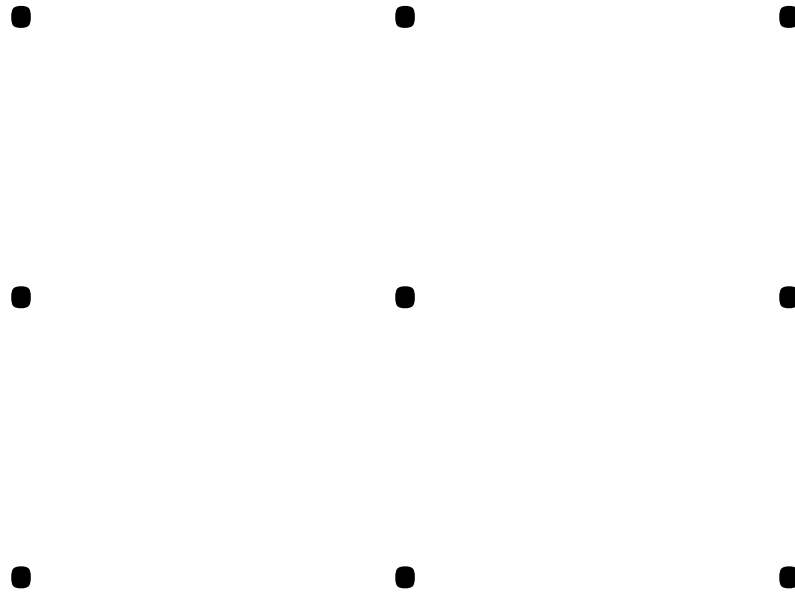
- . . . a *hierarchy* is a sequential organization
- . . . it progresses upward *from simple to complex*
- . . . each level *builds upon the preceding level(s)*
- . . . an appropriate concept map of Bloom's Taxonomy is *pyramidal* in shape, beginning at the base with knowledge and progressing upward
- . . . *at the highest levels there is no 1 "right" answer*

Ex.: What is your opinion of . . . ?

What conclusions can you draw from . . . ?

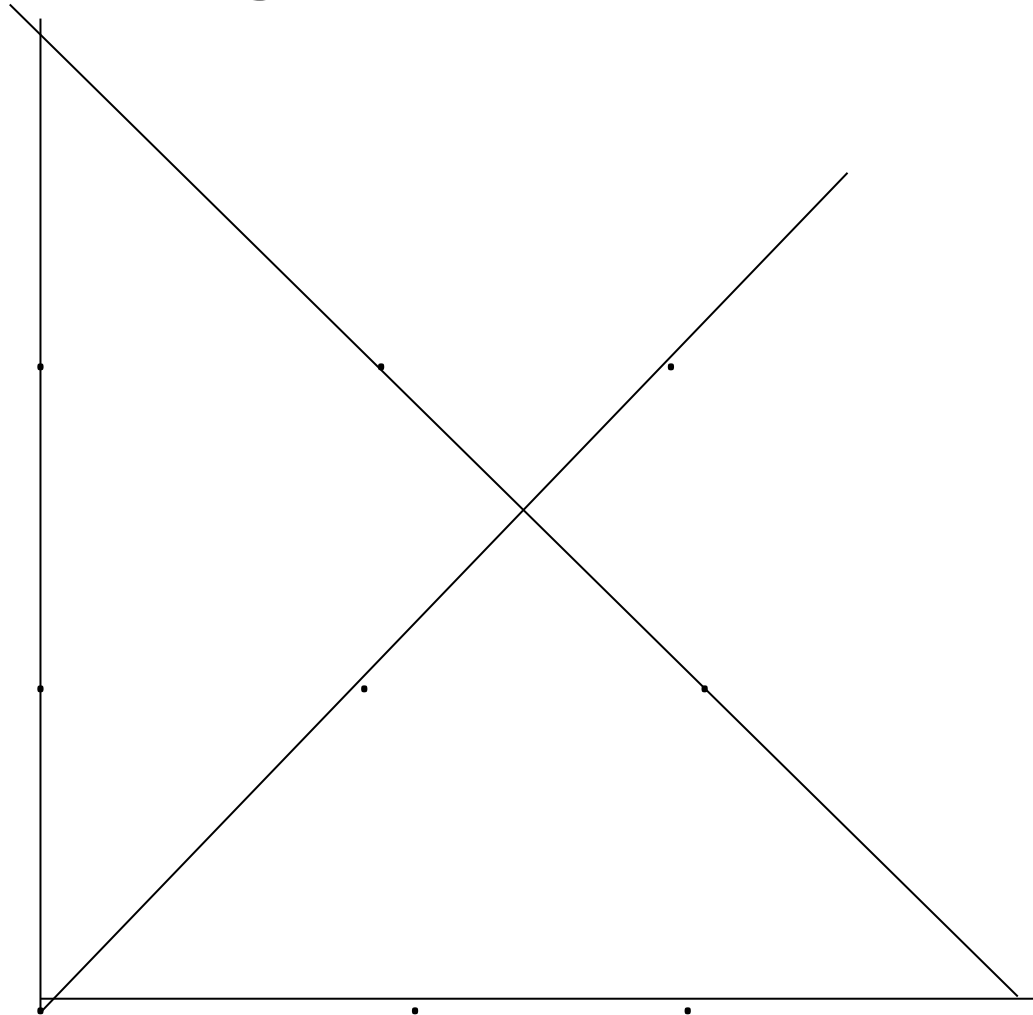
How would you rate the movie . . . ?

Critical Thinking Application



How can the definition of critical thinking help you solve this problem? Connect the 9 dots using 4 straight lines. Once you start drawing the lines, do not stop until all 9 dots have been connected. **HINT:** Lines may be vertical, horizontal and/or diagonal.

Solution— Critical Thinking Exercise





How important is
critical thinking
for today's
students?

WHY IS CRITICAL THINKING IMPORTANT TODAY?

- 75% of employers want education institutions to place a higher emphasis on these students' skills:
 - *Critical thinking*
 - *Complex problem solving*
 - *Written and oral communications*
 - *Applying knowledge in real world situations*

Source:

- AACU Survey, 2013

Why Is Critical Thinking Important?

It . . .

- . . . underlies reading, writing, listening and speaking—basic elements of communication
- . . . plays an important part in social change. . .
institutions in any society—courts, governments, schools, businesses—are the products of critical thinking
- . . . plays a major role in technological advances
- . . . blazes a path to freedom from half-truths and deceptions

How Can One Become a Critical Thinker?

- By asking pertinent questions (of self as well as others);
 - By assessing statements and arguments;
 - By developing a sense of observation and curiosity;
 - By becoming interested in finding new solutions;
 - By examining beliefs, assumptions, and opinions and weighing them against truth.
 - By developing a “thinker’s vocabulary”.
- By listening carefully to others, thinking about what they say, and giving feedback;
 - By observing with an open mind;
 - By making assertions based on sound logic and solid evidence;
 - By sharing ideas with others;
 - By becoming an open-minded listener and reader;
 - By engaging in active reading and active listening!

Final Words

- Critical thinking is “higher level” thinking
- It often requires us to think “outside the box”
- Many occupations/careers require critical thinking
- The things we enjoy in everyday society are the result of critical thinking
- By adopting certain habits and behaviors we can learn to think critically.