

# METACOGNITION

is thinking about your thinking.

## HOW DO I PRACTICE METACOGNITION?

### Consider context of knowledge.

- When is this information true and not true?
- What knowledge am I building on?
- What knowledge does this connect to?
- Where else can I apply this information?

### Reflect on methods of learning.

- Flashcards
- Reading
- Writing
- Lists
- Outlines
- Mnemonics
- Teaching others
- Slides
- Songs
- Memes

### After class activity: clearest & muddiest point

After each class, write down the concepts that were clear and muddy (unclear). Go to office hours to discuss your muddy points.

### Map out your problem-solving strategies.

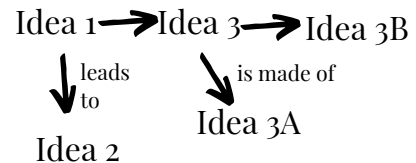
Use CER method

Draw a picture.

Make an outline:

Make a concept map:

- Idea 1
- Idea 2
- Idea 3
  - Idea 3A
  - Idea 3B



## HOW TO ANSWER A QUESTION ON AN EXAM FOR FULL CREDIT:

What kind of triangle is this?

### ANSWER USING THE CER METHOD

**Claim:** an assertion or statement

ex: this triangle is a right triangle.

**Evidence:** data

ex: the largest angle is 90 degrees as shown by the square.

**Reasoning:** logic or principle

ex: angles of 90 degrees are right angles & triangles with right angles are right triangles.

Be concise.

**PRO TIPS**

- Underline key words in your answer.
- Unless prohibited, schematics & drawings often help.
- Stay on-topic; irrelevant information is irrelevant.
- Integrate learning objectives from syllabus into answer.
- Number parts of question & corresponding parts of answer.

### ASK 'WHY?'

Why is my professor asking me this question?

### ASK 'WHAT?'

What material related to this from class?  
What information might my professor be looking for?

### ASK 'HOW?'

How can I demonstrate my knowledge?