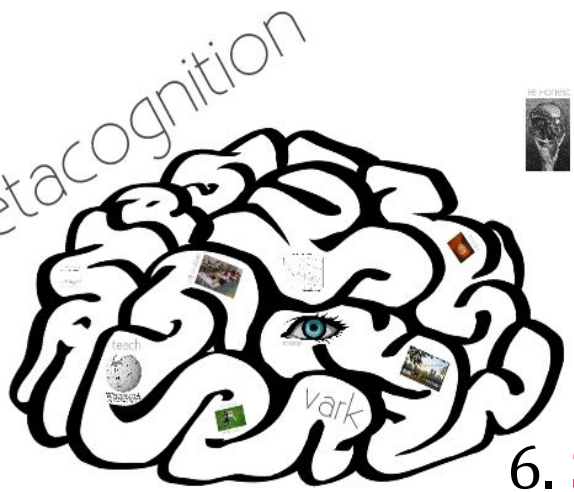
Metacognition

Please form teams of 4 (rows 1&2, 3&4, ...)

Discuss the videos



1. Be honest – can you describe it?
2. Start early – stay ahead of teacher
3. Engage – be serious about learning
4. Teach – explain to somebody else
5. Study often – the forgetting
6. Self evaluate – not during the test
7. VARK – know your learning styles
8. Take a break – short study sessions
9. Have fun – study groups, whatever
10. Set a goal – never give up

How to Learn: Metacognition is the Key!

The following slides are by
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Metacognition

The ability to:

- think about one's own thinking
- be consciously aware of oneself as a problem solver
- monitor, plan, and control one's mental processing (e.g. "Am I *understanding* this material, or just *memorizing* it?")
- accurately judge one's level of learning

Reflection Questions

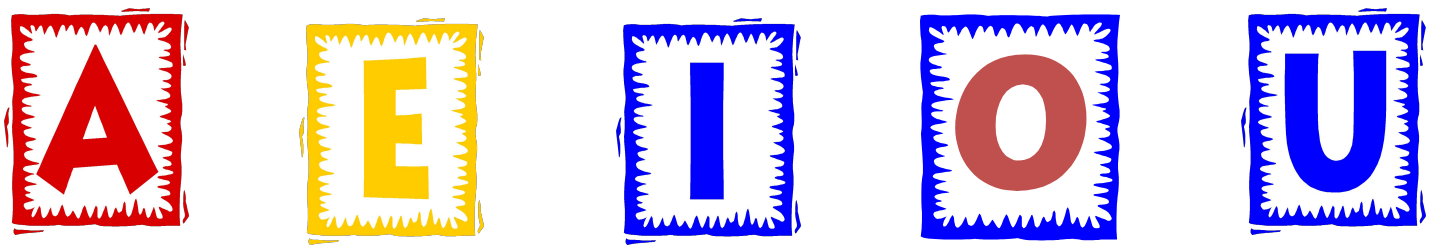
- What's the difference, if any, between *studying* and *learning*?

- For which task would you study more?

  A. Make an A on the test

  B. Teach the material to the class

Counting Vowels in 45 seconds



How accurate are you?

Dollar Bill
Dice
Tricycle
Four-leaf Clover
Hand
Six-Pack
Seven-Up
Octopus

Cat Lives
Bowling Pins
Football Team
Dozen Eggs
Unlucky Friday
Valentine’s Day
Quarter Hour

How many *words* or *phrases* do you remember?

Let's look at the words again...

What are they arranged according to?

Dollar Bill
Dice
Tricycle
Four-leaf Clover
Hand
Six-Pack
Seven-Up
Octopus

Cat Lives
Bowling Pins
Football Team
Dozen Eggs
Unlucky Friday
Valentine’s Day
Quarter Hour

NOW, how many words or phrases do you remember?

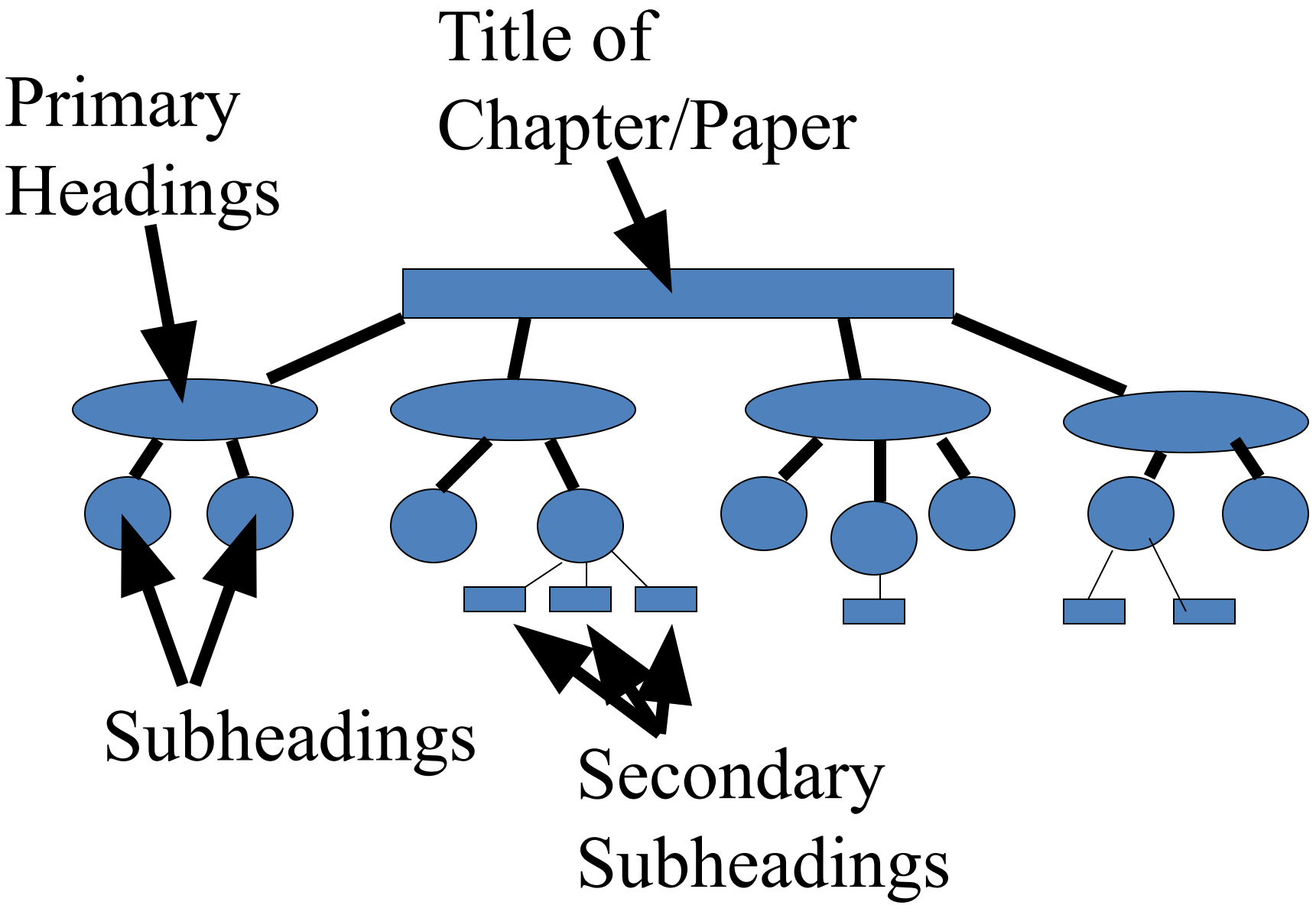
What were two major *differences* between the two attempts?

1. We knew what the task was
2. We knew how the information was organized

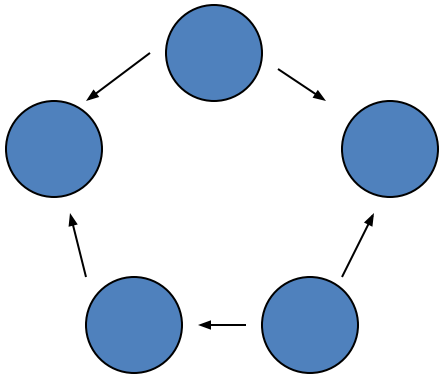
Concept Maps / Graphical Organizers

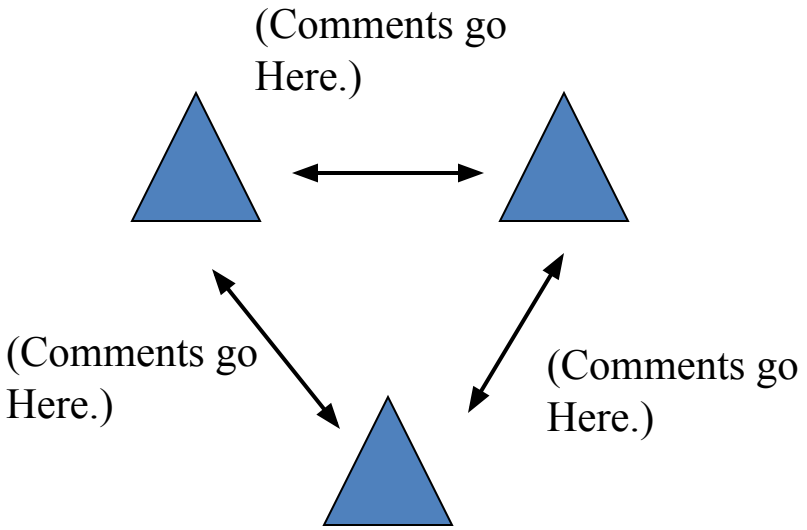
Facilitate development of higher order thinking skills!

Chapter/Paper Map

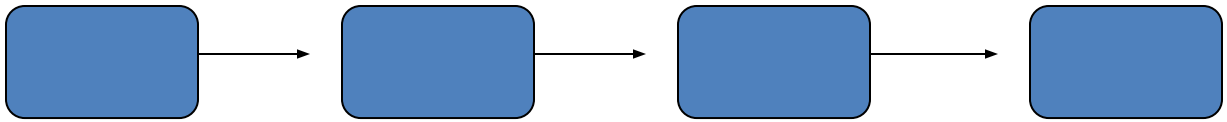


Ideas…

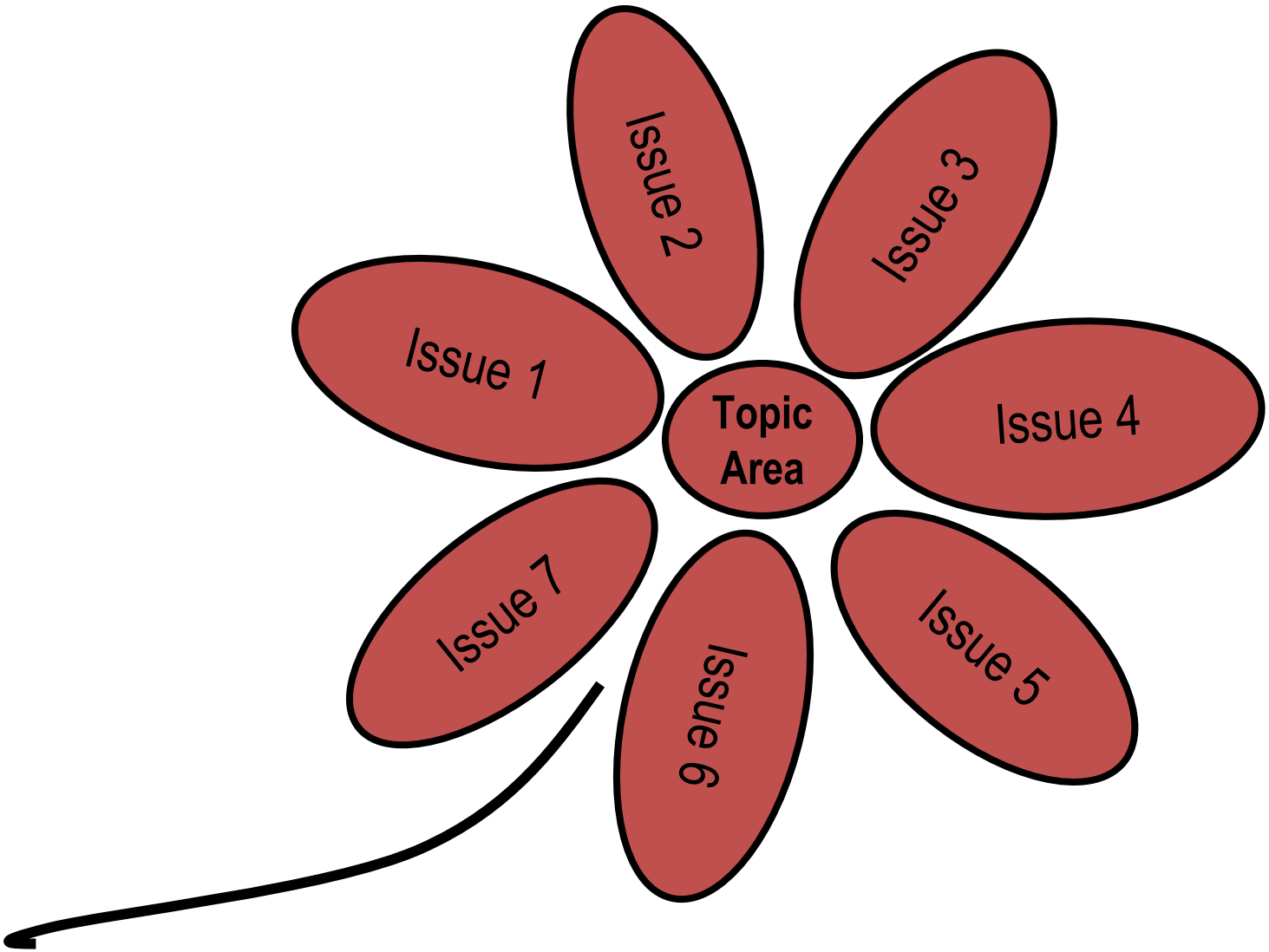




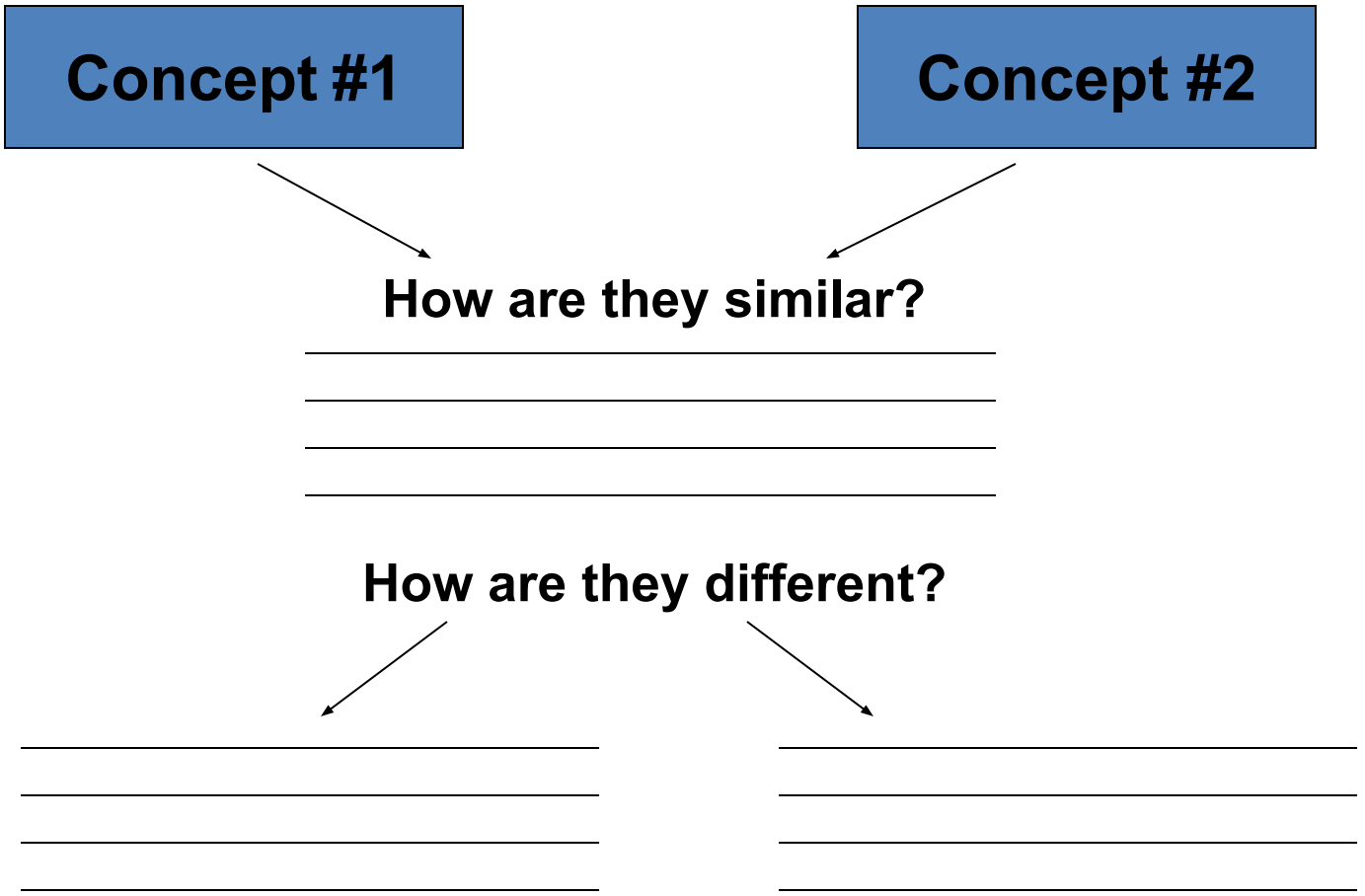
Cause and Effect:



Get Creative!



Compare and Contrast

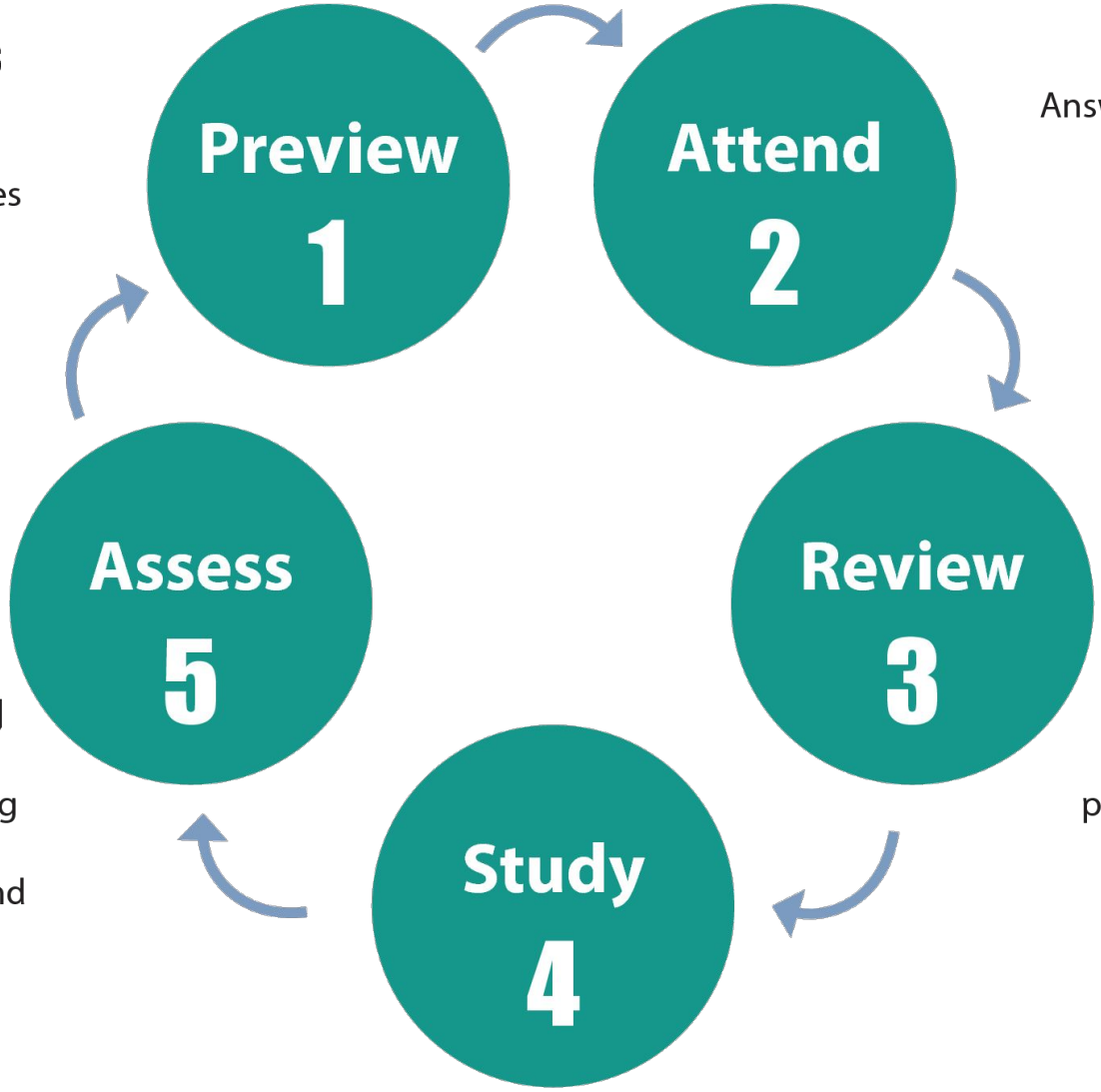


Timeline Activity

Section 0.2

Preview Before Class

Skim the chapter. Note headings and boldface words. Review summaries and chapter objectives. Come up with questions you'd like the lecture to answer for you.



Attend Class

Answer and ask questions and take meaningful, thorough notes.

Assess Your Learning

Periodically perform reality checks. "Am I using study methods that are effective? Do I understand the material enough to teach it to others?"

Review After Class

As soon after class as possible, read notes, fill in gaps, and note any questions you have.

Study the Material

Repetition is key. Ask questions such as "why", "how", and "what if." Use Intense Study Sessions (see below). Do 3 - 5 short study sessions a day. Use weekends to review. Read notes and material from the week to make connections.

INTENSE STUDY SESSIONS

1. Set a Goal	(1 - 2 minutes)	**Decide** what you want to accomplish in your study session
2. Study with Focus	(30 - 50 minutes)	**Interact with material** – organize, concept map, summarize, process, re-read, fill-in notes, reflect, etc.
3. Reward Yourself	(10 - 15 minutes)	**Take a break** – call a friend, play a short game, get a snack
4. Review	(5 minutes)	**Go over** what you just studied

Exercises 2 & 3 -- Big Ideas

Reminders

- If you haven't already, submit pre-survey and Lab01 (we'll accept late work this first week)
- Take **Quiz01** on Canvas
  - Use it to prepare for Monday's exam
    - 1st attempt: closed book, closed notes
    - 2nd attempt (optional): open book/notes
- Study *everything* for the exam!
  - Activities, labs, textbook, slides, handouts
    - Including the syllabus, seven big ideas, study cycle