SUNY Cortland
Supplemental Instruction

Strategy Cards

Card Index

SUNY Cortland
Supplemental Instruction

Opener This works best as a 5-15 minute opening activity.

Closer This works best as a 5-10 minute closing activity.

Main Activity This works best as a 20-40 minute main activity.

Opener **Closer** This can work as either an opening or closing activity.

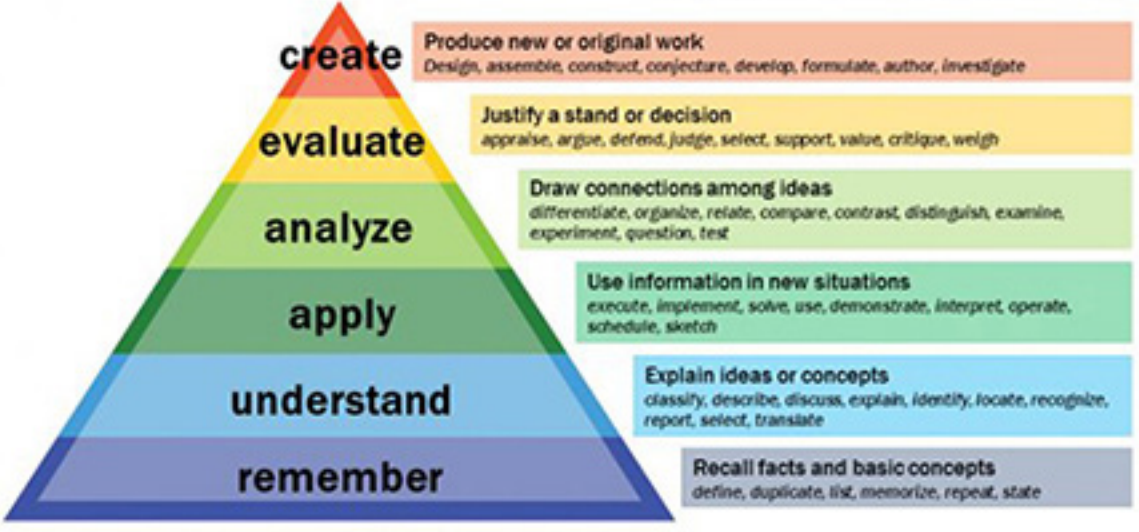
V This activity focuses on vocabulary terms.

F Facillitation technique

T This activity works well for test preparation.

SUNY Cortland
Supplemental Instruction

Bloom's Taxonomy



F

SUNY Cortland
Supplemental Instruction

Redirecting Questions

Redirecting questions is one of the core practices of supplemental instruction. Resist answering student questions yourself, rather guide the student(s) to work to the solution themselves. This practice is crucial to being an effective SI leader.

1. **Redirect to students.**

Sample phrases:

Does anyone know the answer?

What is this question asking for?
What part(s) of the problem do you understand?

2. **Redirect to students' notes**

F

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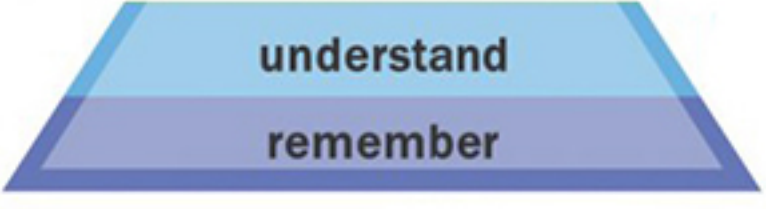
Supplemental Instruction

Checking for Understanding

1. **Open-ended questions** most effectively check for student understanding. Always be specific.
    1. ~~Do you understand?~~
    2. Can you summarize the Calvin Cycle for us?

2. Every now and then **make an intentional mistake** on the board. If students understand, they will catch it. If not, you can probe them for what they do understand and build up to the "mistake."



F

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Supplemental Instruction

Wait Time

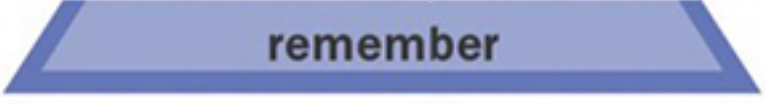
1 There are two types of wait time -

1. The time an SI Leader waits after asking a question.
2. The time an SI Leader waits after a response is provided, **regardless of the accuracy of the response.**

2. Wait time is accomplished by waiting 15-20 seconds. A good techinque is to silently count to twenty before ending the silence.

3. Wait time accomplishes two things -

1. It takes advantage of the discomfort of silence to encourage a response, even if the responder is uncertain of their answer.
2. It allows the brain time to consolidate and process information.



F

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Managing Session Space

One or more students may dominate the session by constantly talking. Here are some ways to open up the space for others.

1. **Assign a scribe.** A scribe is a student designated to write other student's answers on the board. Try assigning a domineering student this role so others are free to talk.
2. **Redirect their answers for class evaluation.** Refuse to confirm or deny the student's answers. Instead redirect evaluation to other students. Do they think the answer is correct? Why or why not?
3. **Anoymous answers.** Have each student write their answers on a slip of paper. Then collect and randomly redistribute the slips. Call on students to read their slip and explain why they think the answer is right or wrong.

F

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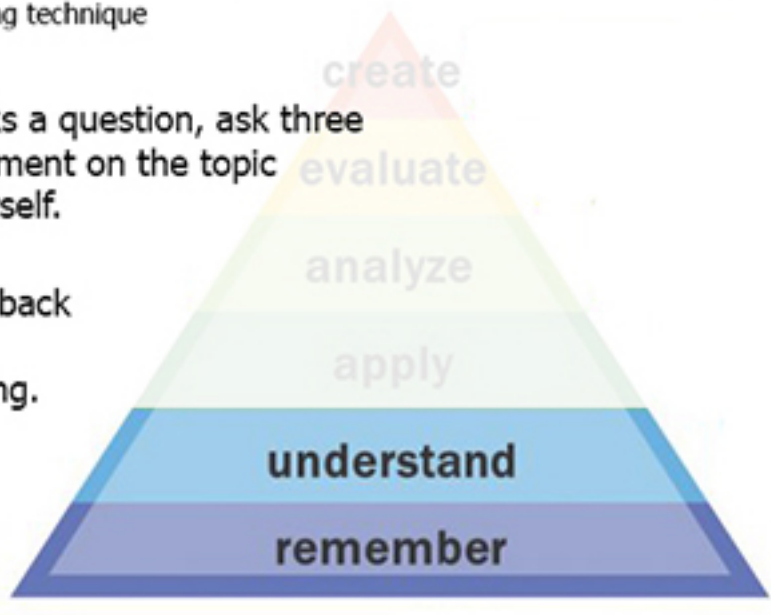
Three Before Me

This is an excellent redirecting technique

1. When a student asks a question, ask three other students to comment on the topic before answering yourself.

2. Redirect responses back to other students to check for understanding.



Opener

V

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Memory

1. Prepare a number of index cards,
   half with vocabulary terms,
   half with their corresponding definitions.
2. Spread the cards randomly on a table.
3. Have students take turns flipping two cards at a time
   until a match is found, then remove those cards.
4. Continue until all the matches are found.

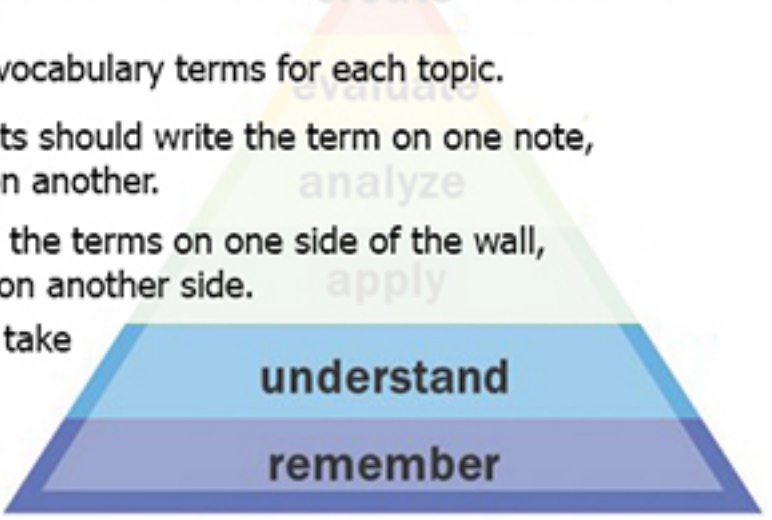
Opener

V

SUNY Cortland
Supplemental Instruction

Post-It Wall Matching

1. Prepare a stack of blank post-it notes for each topic you want to cover.
2. Have students find vocabulary terms for each topic.
3. Once found, students should write the term on one note, and the definition on another.
4. Have them place all the terms on one side of the wall, and the definitions on another side.
5. Have students then take turns matching the terms to their definitions



Opener

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Supplemental Instruction

Current Events

1. Bring in copies (or project) of an article relevant to the class material. You may also use youtube clips or TED talks.
2. Have students read the article and highlight any points they find relevant to the class or points they did not understand.
3. Dicuss these points with the whole session.

Opener

T

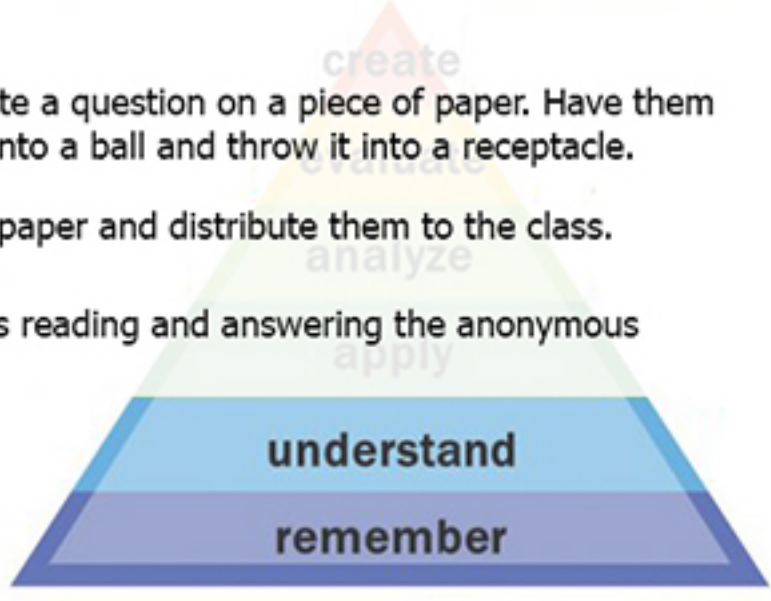
SUNY Cortland
Supplemental Instruction

Snowball

1. Ask students to write a question on a piece of paper. Have them crumple the paper into a ball and throw it into a receptacle.

2. Collect the balls of paper and distribute them to the class.

3. Students take turns reading and answering the anonymous questions.



Opener V T

SUNY Cortland
Supplemental Instruction

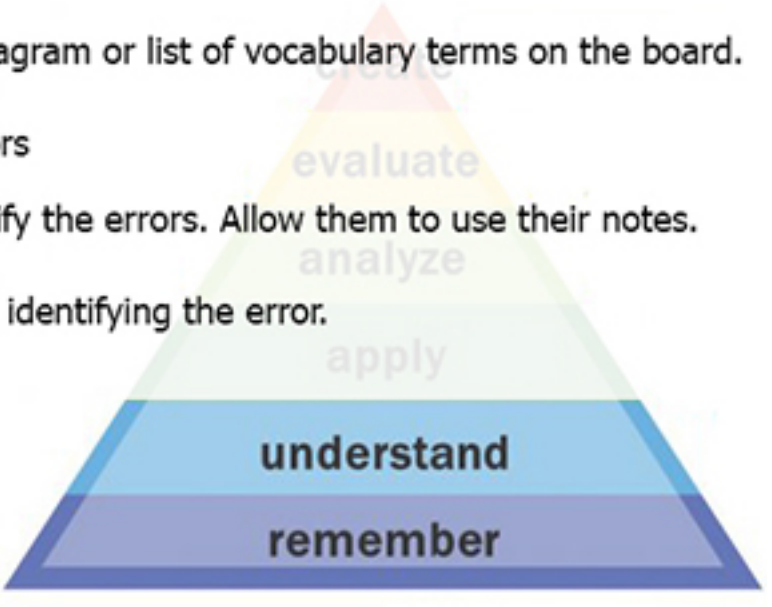
Find the Error

1. Prepare a labeled diagram or list of vocabulary terms on the board.

2. Incorporate 2-3 errors

3. Have students identify the errors. Allow them to use their notes.

4. Discuss the steps to identifying the error.

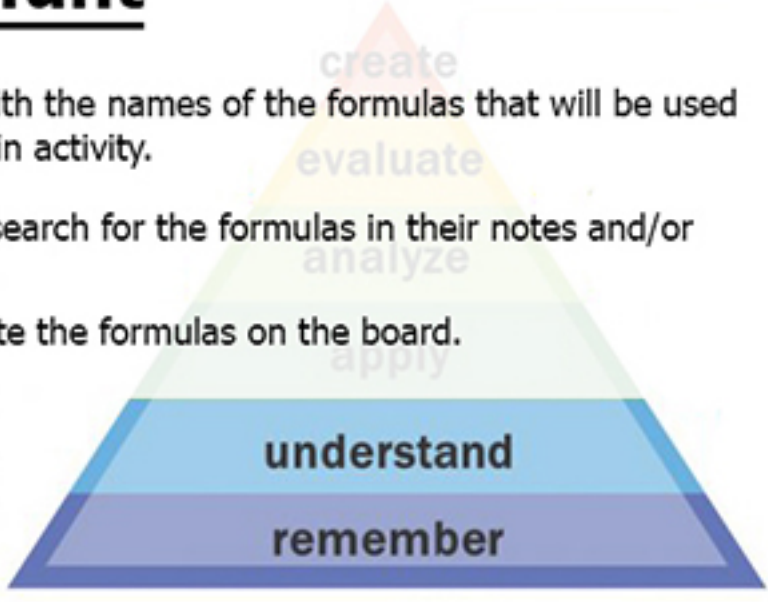


Opener

SUNY Cortland
Supplemental Instruction

Formula Hunt

1. Provide students with the names of the formulas that will be used in the session's main activity.
2. Give them time to search for the formulas in their notes and/or online.
3. Ask students to write the formulas on the board.
4. **Option:** if nobody volunteers to write, have them pass the chalk to another student.



Opener

V

SUNY Cortland Supplemental Instruction

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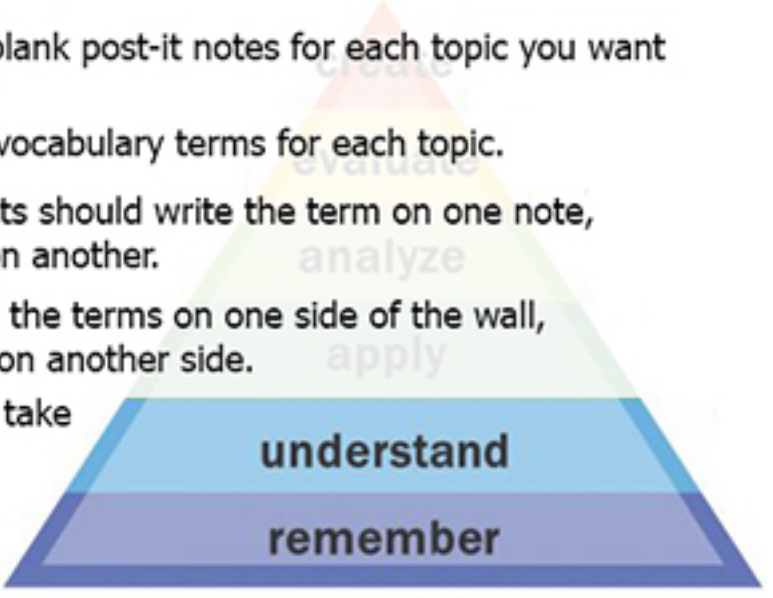


Opener

V

SUNY Cortland
Supplemental Instruction

Vocabulary Development

Materials needed: index cards

1. Ask students to list five terms from the previous lecture on index cards (one term per card).
2. Scramble the cards, then ask pairs of students to organize the terms into categories that are meaningful.
3. Have them define or give an example of each term.
4. Have each pair discuss their terms with the session.

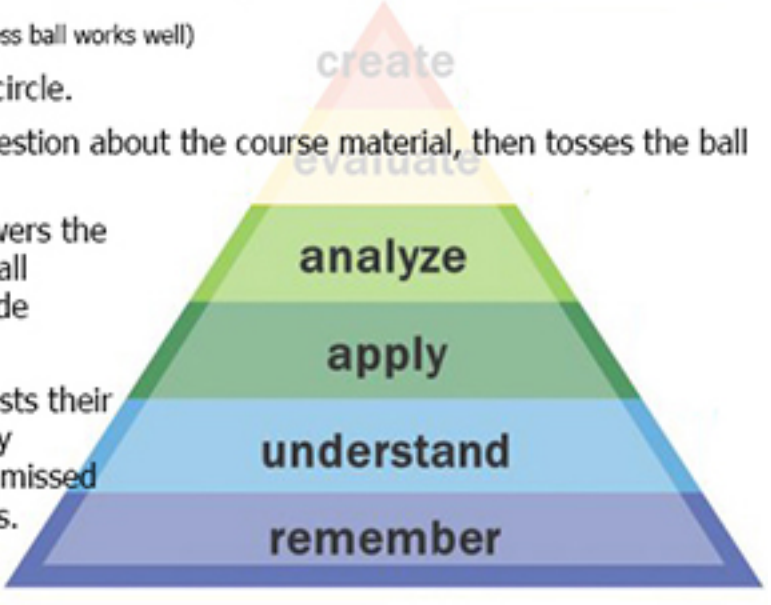
Opener

SUNY Cortland
Supplemental Instruction

Verbal Volleyball

Materials needed: a ball (a stress ball works well)

1. Arrange students in a circle.
2. One student asks a question about the course material, then tosses the ball to someone to answer.
3. Once the student answers the question, they toss the ball to someone else to provide another question.
4. Once the group exhausts their questions you can list any important concepts they missed and **redirect** for answers.



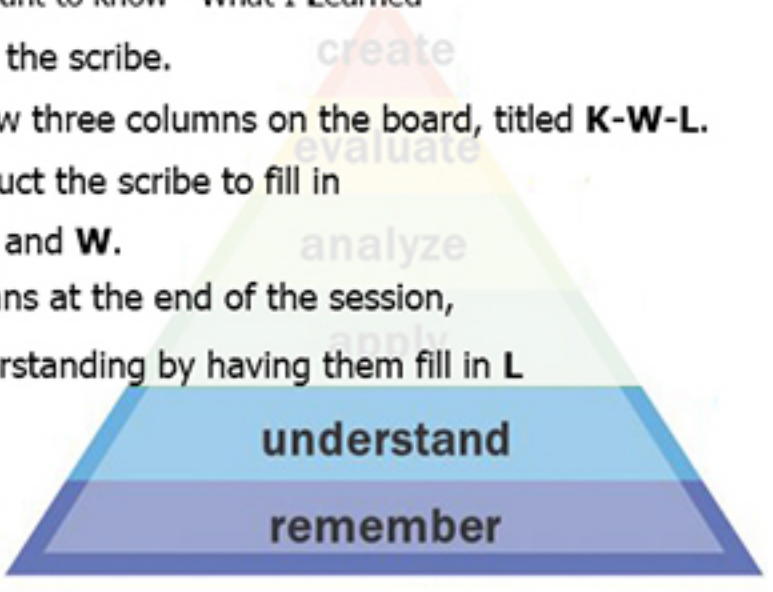
Opener Closer

SUNY Cortland
Supplemental Instruction

K-W-L

What I **K**now - What I **W**ant to know - What I **L**earned

1. Ask a student to be the scribe.
2. Have the scribe draw three columns on the board, titled **K-W-L.**
3. Have students instruct the scribe to fill in their answers for **K** and **W.**
4. Return to the columns at the end of the session, and check for understanding by having them fill in **L**



Opener Closer

SUNY Cortland
Supplemental Instruction

Learning Logs

1. Have students answer a prompt to open or close a session.

2. Give them five minutes to answer, then discuss with the session.

3. Example prompts -
- Write 3 sentences describing what you learned today (or in lecture)

- Write the most important ideas from today's session.

- Write 3 questions that might be on the next test.

- What confused you most about this session?

Opener Closer

SUNY Cortland Supplemental Instruction

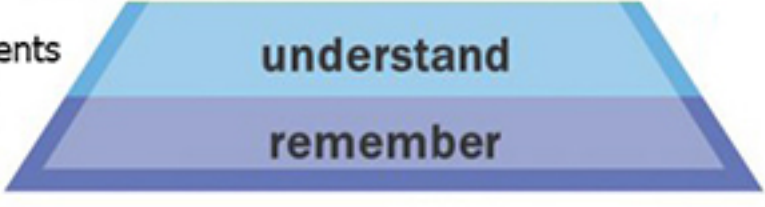
One Minute Paper

1. Ask students to write for one minute on a topic you suggest.

2. Students should not worry about grammar, sentence structure, or paragraph cohesion. The point is for them to use writing to stimulate recollection and understanding.

3. Tell students to stop after one minute. Ask them to share their thoughts with the class or their group.

4. **Option:** have students highlight key ideas in their paper before sharing it with others.

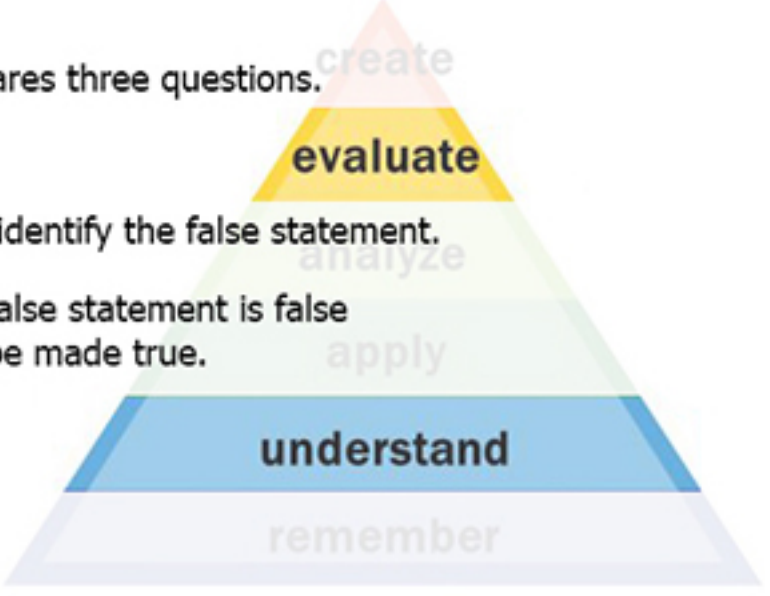


Opener Closer

SUNY Cortland Supplemental Instruction

Two Truths and a Lie

1. The SI leader prepares three questions.
   Two are true.
   One is false.
2. The students must identify the false statement.
3. Discuss why the false statement is false and how it can be made true.



Main Activity T

SUNY Cortland Supplemental Instruction

3:2:1

1. Ask each student to write down:
   - 3 topics they know well enough to explain to others
   - 2 topics they do not understand well
   - 1 possible exam question
2. Ask each student to write their **3:2:1** on the board.
3. Identify overlaps. Ask students to explain what they understand to those who do not understand.
4. Discuss their exam questions.

Main Activity

SUNY Cortland
Supplemental Instruction

Affinity Grouping

1. Students generate ideas about a concept, then write them on a post-it.
2. In groups, have the students sort their post-its into categories on the board to identify common themes.
3. Have students create a heading for each resulting group.
4. Have the entire session discuss the categories

Main Activity T

SUNY Cortland Supplemental Instruction

Around the World

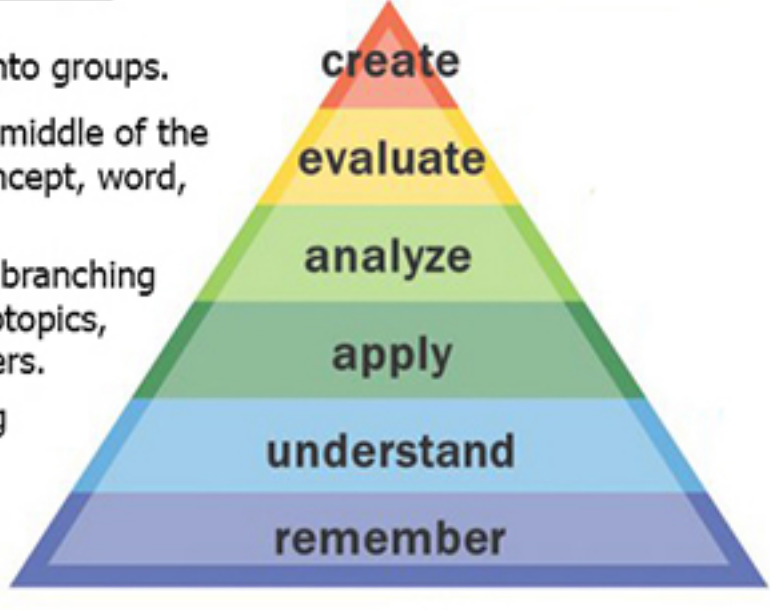
1. Prepare 20-30 closed questions with simple answers and arrange the desks/chairs in a circle before the session.
2. With the students seated in a circle, ask two students to stand up next to each other in the middle and ask them a question.
3. The first student to answer correctly remains standing. The other student returns to their seat.
4. The student who beats every student, i.e. goes "around the world," wins. (Or the student with the most answers wins.)

Main Activity

SUNY Cortland
Supplemental Instruction

Concept Map

1. Organize students into groups.
2. Draw a circle in the middle of the board with a broad concept, word, or question.
3. Ask groups to draw branching circles with related subtopics, words, ideas, or answers.
4. Discuss the resulting concept map with the whole session.



See reverse for example

Main Activity

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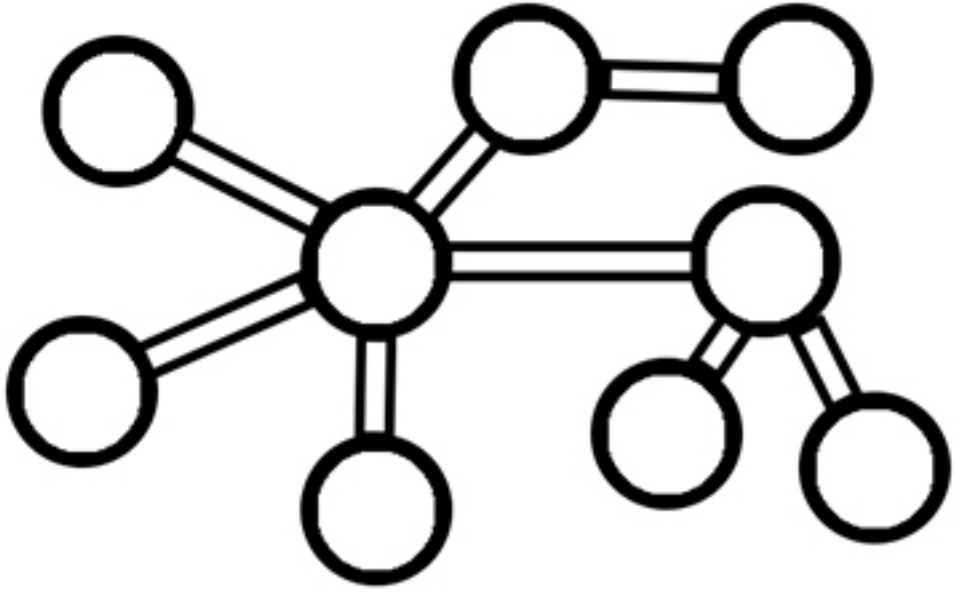
Supplemental Instruction

Example Concept Map



Main Activity

SUNY Cortland
Supplemental Instruction

Example Role Play

1. Organize students into groups.
2. Have each group make up an example scenario or story focused on a difficult concept.
3. If possible have the students act out the scenario/story (if willing).

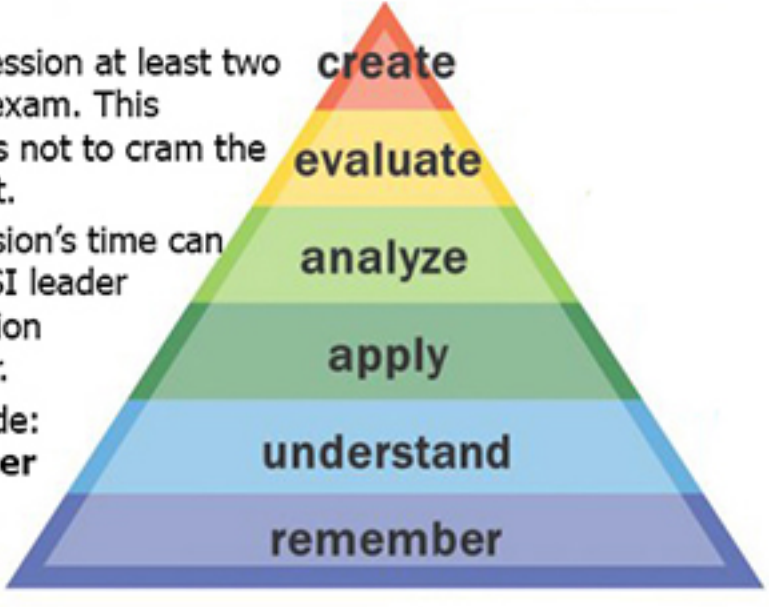
Main Activity

T

SUNY Cortland
Supplemental Instruction

Extended Review Sessions

1. Hold an extended session at least two sessions before an exam. This encourages students not to cram the night before the test.
2. Each extrended session's time can be credited by the SI leader for a cancelled session during the semester.
3. Good activites include:
   Divide and Conquer
   Jeopardy
   Rainbow Brain Dump

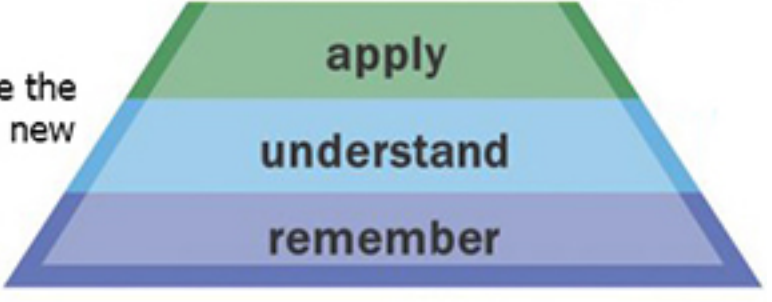


Main Activity V

SUNY Cortland Supplemental Instruction

Guess Who

1. Give each student a list of concepts and/or vocabulary terms.
2. Give them time to write decriptions and/or definitions.
3. Divide the students into pairs.
4. Each student takes a turn providing clues to their partner about their terms. The other student must guess the term as quickly as possible.
5. If time permits, have the students rotate to a new partner and repeat.



Main Activity

SUNY Cortland
Supplemental Instruction

Going Microscopic

by Samantha Robbins, SI Mentor, Class of 2020.

1. Arrange the students into small groups.
2. Assign each group one or more scenarios.
3. Each group imagines themselves as microscopic and takes turns describing everything they would see, feel, pass through or react with as they go through the scenario.
4. Groups then share their findings with the session.

Main Activity

SUNY Cortland Supplemental Instruction

Going Microscopic - Examples

by Samantha Robbins, SI Mentor, Class of 2020.

1. Suppose you are a parasitic worm that infects the heart muscles of a snake. In order to reach the heart muscles you must first enter through the integument, where you enter the posterior vena cava. However, before going to the heart muscles you must mature in the lungs.
2. Imagine you are a bacteria that enters through the skin of a frog and infects the red marrow of the femur.
3. Suppose you are a parasitic worm infecting the kidneys of humans (specifically the pelvis of the kidney). You enter as an egg that is inhaled and then matures in the liver before moving to the pelvis of the kidney. Remember: in order to enter the pelvis of the kidney you must travel through a nephron.

Main Activity V

SUNY Cortland Supplemental Instruction

Guess Who

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5. If time permits, have the students rotate to a new partner and repeat.

Main Activity

SUNY Cortland
Supplemental Instruction

Hierarchies

May be run individually or with groups.

1. Prepare a series of hierarchically arranged rectangles on the board. Identify some but leave the bulk empty.

2. Have students come up and fill in the empty boxes.

3. Discuss their answers after using wait time and redirecting.

Main Activity

SUNY Cortland
Supplemental Instruction

Incomplete Outline

Set up: see other side of card.

1. Compose an outline based on recent lecture material.

2. Fill in umbrella terms/concepts. Leave the specifics blank.

3. Have students come up and fill in the blanks.

4. Meet students' level of understanding by letting them use their notes, and/or filling in the occasional blank.

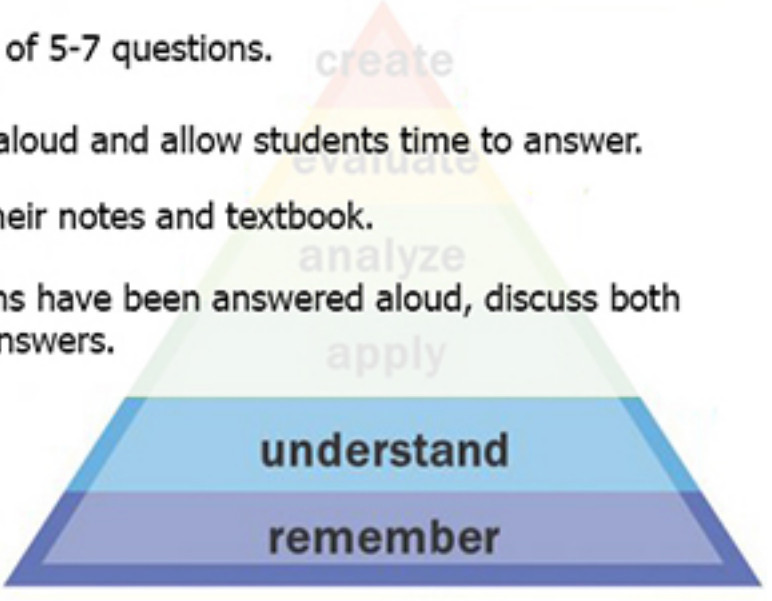
Main Activity

T

SUNY Cortland Supplemental Instruction

Informal Quiz

1. Prepare a short quiz of 5-7 questions.
2. Read the questions aloud and allow students time to answer.
3. Allow them to use their notes and textbook.
4. After all the questions have been answered aloud, discuss both errors and correct answers.



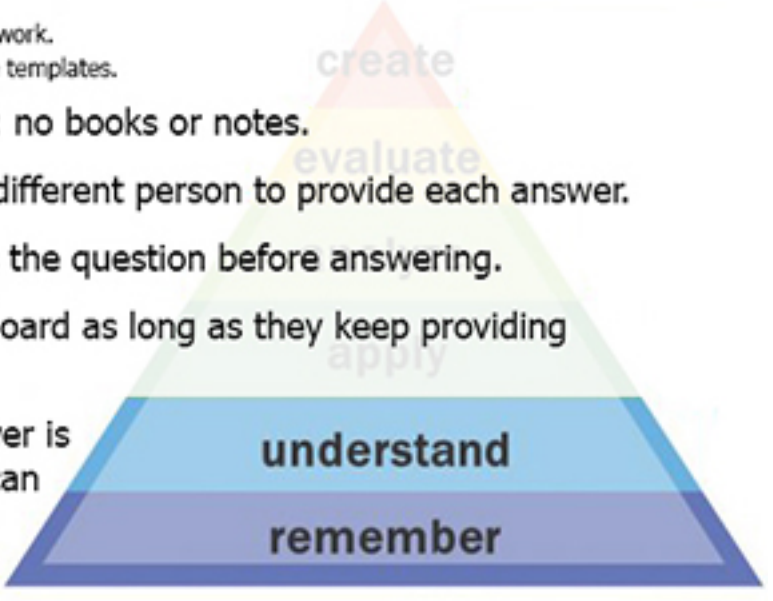
Main Activity T

SUNY Cortland Supplemental Instruction

Jeopardy

Set up: arrange desks for group work.
jeopardylabs.com provides free templates.

1. Announce the rules: no books or notes.
2. Teams designate a different person to provide each answer.
3. Groups may discuss the question before answering.
4. Teams control the board as long as they keep providing correct answers.
5. If an incorrect answer is given, the next team can steal by answering correctly.



Main Activity

SUNY Cortland Supplemental Instruction

Jigsaw

1. Break up students into groups, then assign each group a topic or task.
2. It is the group's responsibility to become an expert in their given topic or task.
3. Individual students then move from their expert group to another jigsaw group and act as the delegate of their topic. They teach their new group their material.

Main Activity T

SUNY Cortland Supplemental Instruction

Learning Cells

1. Ask each student to create a list of questions and answers on specific content.
2. Organize the students in pairs. Student #1 asks a question and Student #2 answers. Student #1 then offers any corrections, etc.
3. Student #2 then asks a question and Student #1 answers.
4. They continue until all questions are answered.

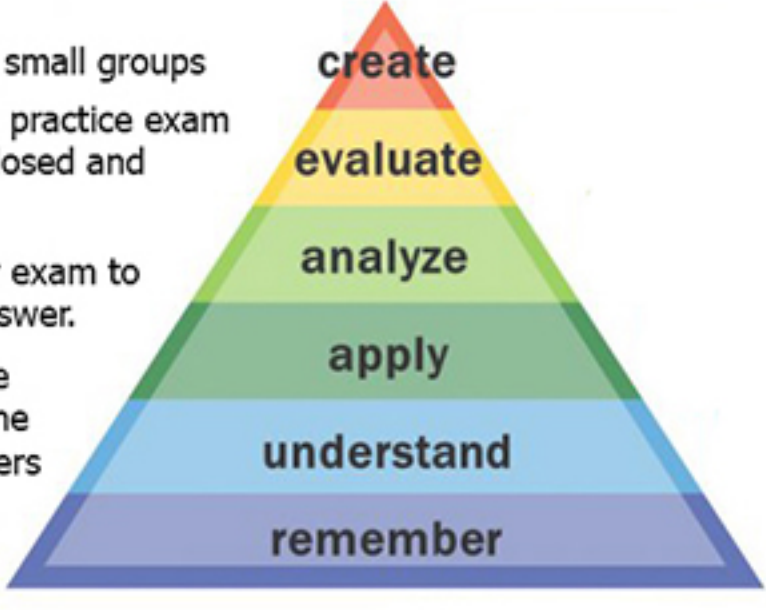
Main Activity

T

SUNY Cortland Supplemental Instruction

Make & Take a Practice Exam

1. Divide students into small groups
2. Each group makes a practice exam composed of both closed and open questions.
3. Then they pass their exam to another group to answer.
4. Once all groups have answered, discuss the questions and answers aloud with the whole session.

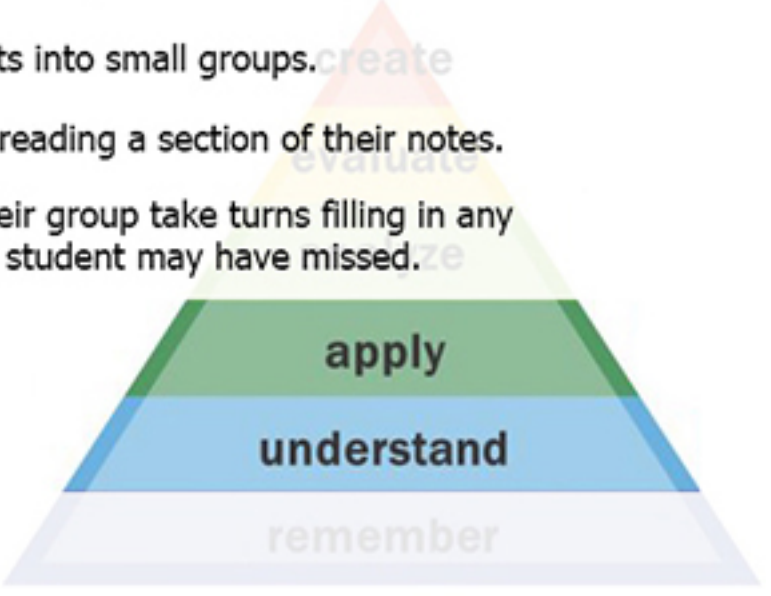


Main Activity

SUNY Cortland Supplemental Instruction

Note Review

1. Organize the students into small groups.
2. Students take turns reading a section of their notes.
3. Other students in their group take turns filling in any information the first student may have missed.



Main Activity T

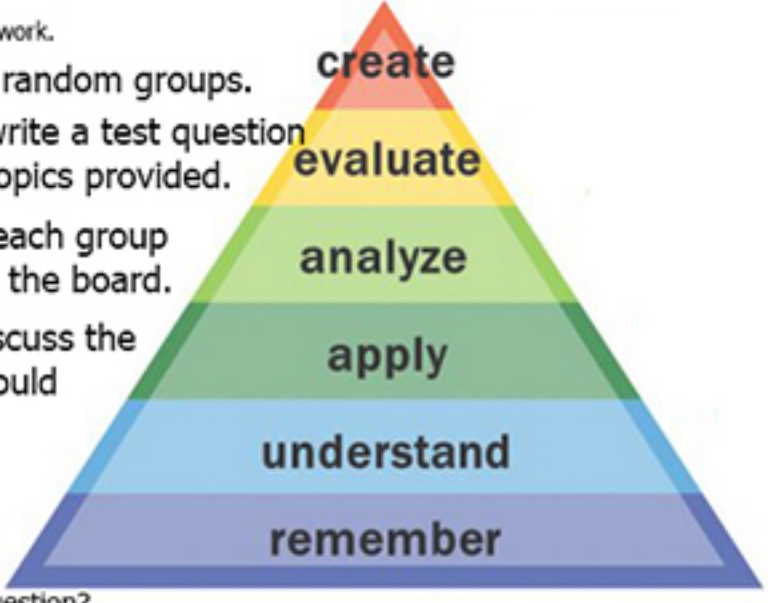
SUNY Cortland Supplemental Instruction

Predict Test Questions

Set up: arrange desks for group work.

1. Arrange students in random groups.
2. Ask each group to write a test question from a list of specific topics provided.
3. Have a scribe from each group write their question on the board.
4. Have the session discuss the question. Discussion could include:

A. Would the professor ask this question?
B. What is the answer?
C. How might it be modified to be an open or closed question?



Main Activity

SUNY Cortland
Supplemental Instruction

Rainbow Brain Dump

Bring several colored dry erase markers or chalk to the session

1. Write 4-5 topics on the board.
2. Have the students come up and write whatever they can recall about the topics using a colored marker/chalk. They should be allowed to feed off of each other's writing as well.
3. Once everyone is done, sit back down and discuss the rainbow writing on the board.

Main Activity

SUNY Cortland
Supplemental Instruction

Relay

1. Prepare a series of platformed questions.

2. Organize students into evenly divided relay teams.

3.Have students complete one step of a problem, then hand off the marker to the next person on their team.

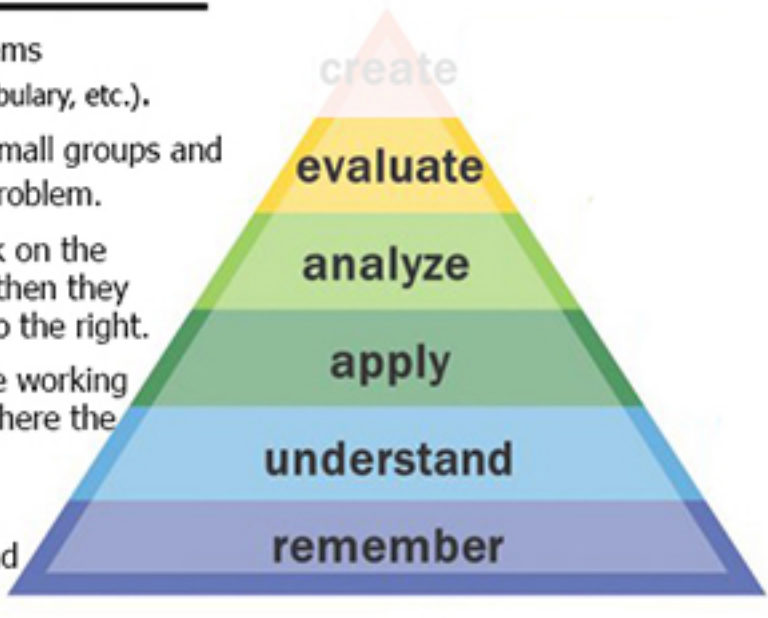
4. Teams race to finish.

Main Activity

SUNY Cortland
Supplemental Instruction

Send a Problem

1. Prepare a list of problems (formulas, diagrams, vocabulary, etc.).
2. Organize students in small groups and assign each group a problem.
3. Allow students to work on the problem for a minute, then they must pass their work to the right.
4. Students then continue working on the problem from where the previous group left off.
5. Continue until all the problems are solved and discuss the answers.

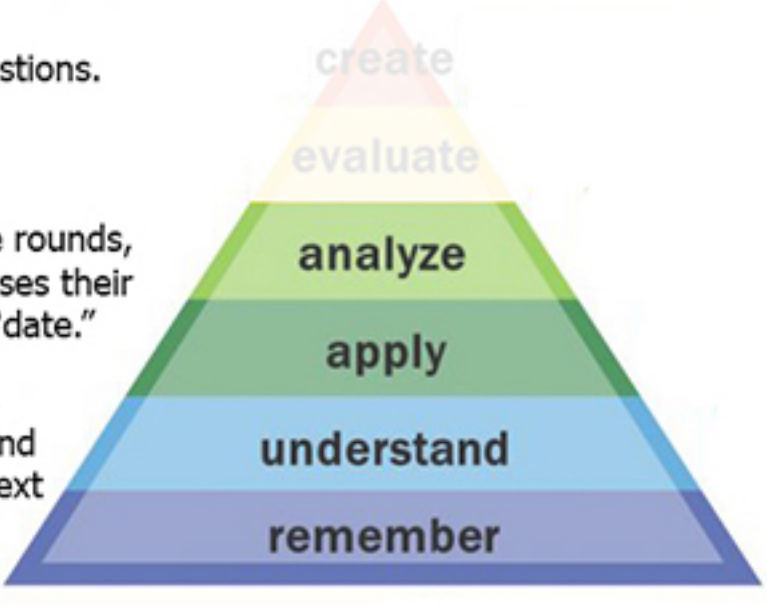


Main Activity

SUNY Cortland Supplemental Instruction

Speed Dating

1. Prepare a list of questions.
2. Pair up students.
3. During three minute rounds, each student discusses their answers with their "date."
4. After three minutes, one student stays and one moves to the next table.

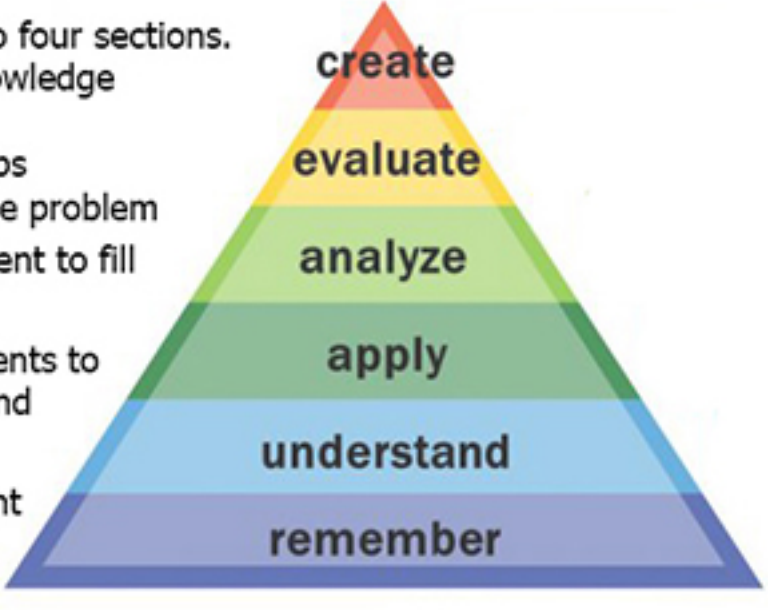


Main Activity

SUNY Cortland
Supplemental Instruction

Steps to Solving Problems

1. Divide the board into four sections.
   1 Prerequisite knowledge
   2. Logical steps
   3. Narrative of steps
   4. Addtional sample problem
2. Encourage one student to fill in section 1.
3. Encourage two students to fill in sections two and three.
4. Have another student complete section 4.



Main Activity

SUNY Cortland Supplemental Instruction

Super Tic-Tac-Toe

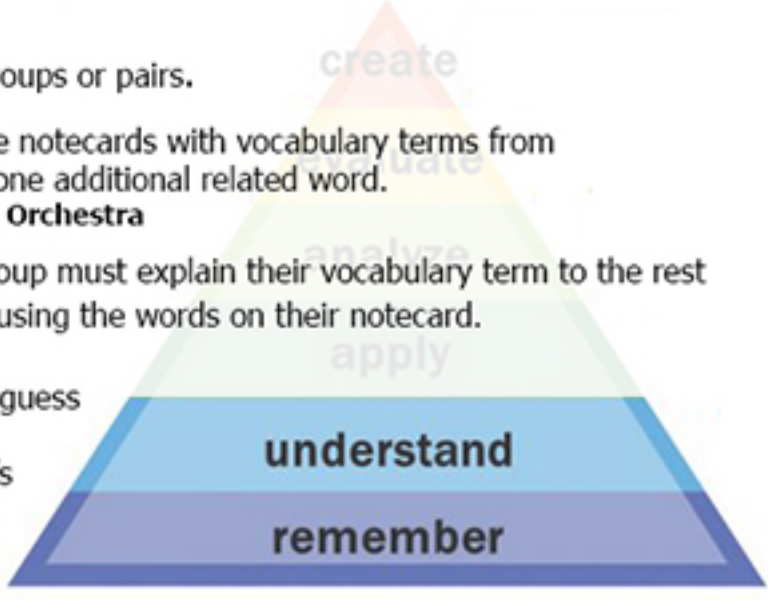
1. Divide the session into two groups.
2. Draw a 3X4 grid on the board. Put a Post-It on each square with a problem written on the back.
3. Each team chooses a scribe for each turn. The scribe can only write what their team tells them.
4. Team A chooses a square and tells their scribe the answer. As the scribe writes Team B can challenge if they spot an error.
5. If Team A gets the correct answer it gets an X or O on the square. If Team B spots an error, it steals the square.
6. Team B goes next. Repeat this process until one team has three Xs or Os in a row

Main Activity V

SUNY Cortland Supplemental Instruction

Taboo

1. Break students into groups or pairs.
2. Have students prepare notecards with vocabulary terms from recent material, plus one additional related word.
   Ex. **Music**, related word: **Orchestra**
3. Each person in the group must explain their vocabulary term to the rest of the group without using the words on their notecard.
4. Group members then guess the vocabulary term based on the student's explanation.



Main Activity

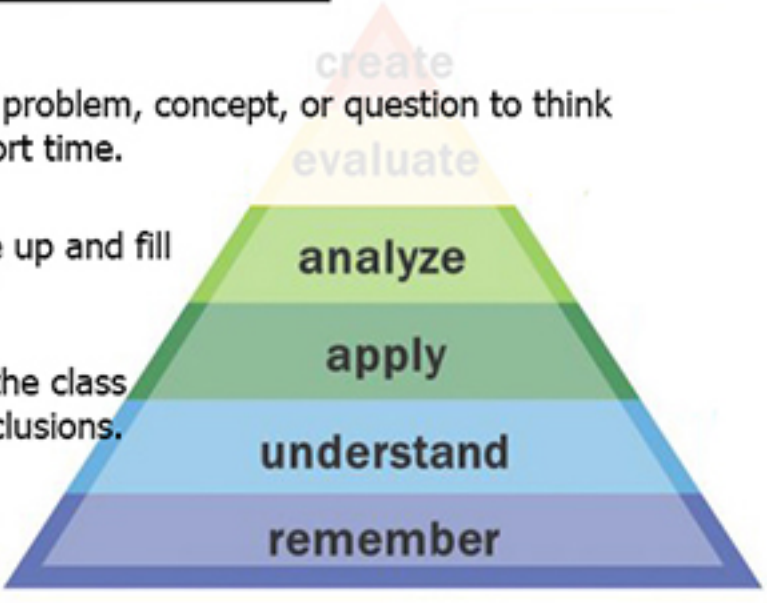
SUNY Cortland Supplemental Instruction

Think - Pair - Share

1. Give each student a problem, concept, or question to think about alone for a short time.

2. Have students come up and fill in the blanks.

3. The pairs then join the class to discuss their conclusions.

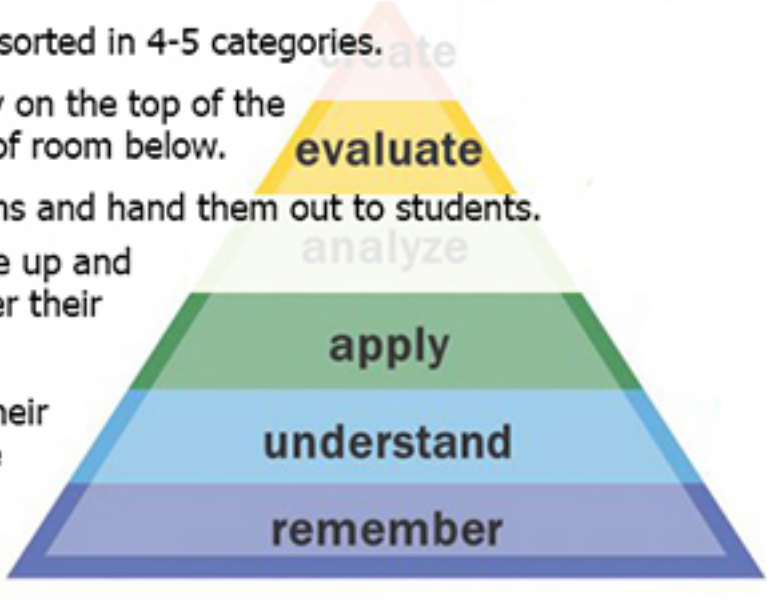


Main Activity V T

SUNY Cortland Supplemental Instruction

Vocabulary Scaffolding

1. Select 15-25 terms sorted in 4-5 categories.
2. Write each category on the top of the board, leaving plenty of room below.
3. Randomize the terms and hand them out to students.
4. Have students come up and write their words under their category.
5. They must justify their category choice to the session.
6. Redirect discussion about their choices.



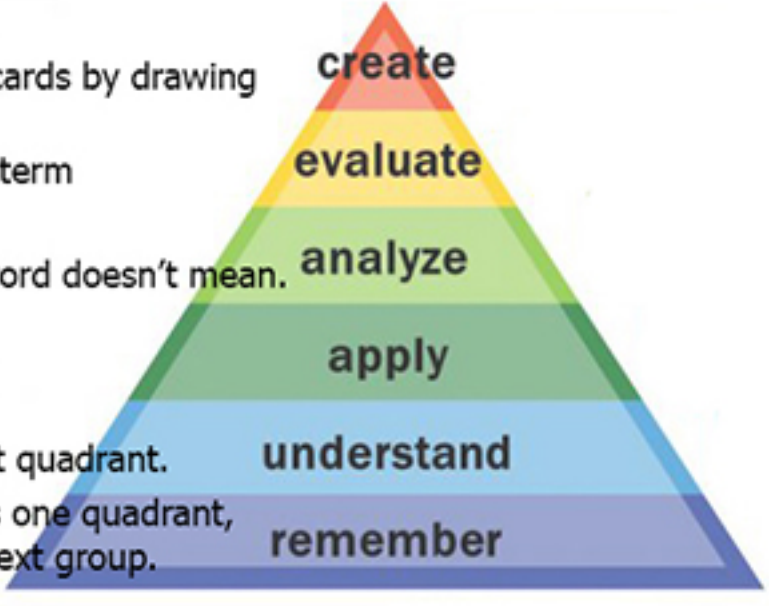
Main Activity V

SUNY Cortland Supplemental Instruction

Word Cards

Materials needed: index cards

1. Prepare 20+ index cards by drawing each into quadrants.
   - **Quad 1:** vocabulary term
   - **Quad 2:** definition
   - **Quad 3:** What the word doesn't mean.
   - **Quad 4:** Illustration (practical example or drawing)
2. You provide the first quadrant.
3. Each group answers one quadrant, then passes it to the next group.



Closer

SUNY Cortland Supplemental Instruction

Identify the Big Idea

1. Ask each student to write down what they thought was the most important concept they learned during the session or from the most recent lecture.
2. Ask each student to read their "big idea" aloud and redirect for discussion.