

CLOSURE

Student-centered

Essential

CLOSURE IS THE ACT OF REVIEWING AND CLARIFYING THE POINTS OF A LESSON, TYING THEM TOGETHER INTO A COHERENT WHOLE, AND ENSURING THEIR UTILITY IN APPLICATION BY SECURING THEM IN THE STUDENT'S CONCEPTUAL NETWORK.

Closure is used:

- To cue students to the fact that they have arrived at an important point in the lesson,
- To help organize student learning (and thus teacher instruction),
- To help form a coherent picture, to consolidate, to eliminate confusion and frustration, etc.,
- To reinforce the major points to be learned, and
- To help establish the network of thought relationships that provides a number of possibilities for cues for retrieval.

(from <http://template.aea267.iowapages.org/lessonplan/>)

Student-Centered:

- Visual Learner: Draw pictures of similarities and differences in characters in a story.
- Auditory Learner: Discuss similarities and differences or prepare a brief oral presentation.
- Kinesthetic Learner: Create a thirty-second reenactment that represents similarities and difference.

Ways to Grade Closure Activities

Inadequate Response

1 - No attempt to answer

2 - Begins, but is unable to complete answer

Satisfactory Response

3 - Minor flaws, but satisfactory answer

Demonstrated Competence

4 - Competent Response

5 - Exemplary Response

Closure Activities

1. Pose an open-ended problem.
2. Have students get with a partner.
3. Groups must produce a wall chart containing 4 elements: statement of the problem on the left side of chart, 3 or more possible ideas for handling the problem on the right side.
4. Next to each option, write advantages and disadvantages of each option.
5. At the bottom of the chart, write the team's overall recommendation for handling the problem.
6. Post charts, students review independently. Discuss the best solution.

1. Divide the class into groups of three.
2. Prepare ahead of time one chart for each group.
3. At the top of the chart write a question, problem, or topic. These can be repeated twice.
4. Distribute the charts to groups; they will discuss and write one fact or bit of information.
5. At a given signal, groups will move to next chart, read, then (as a group) decide what to write.
6. Move at signal until all groups have been to all charts.
7. Hang charts around the room, students will move from chart to chart (at given signal) reading silently.
8. Evaluate learning.

Tip: Have each group use different colored markers. Groups travel to each chart with marker. This way, you can determine which groups were not productive.

Assign each student a concept and have him/her teach it to the class.

Have each student design a test question on the content. Students love to see their questions used on the actual test.

Create a Jeopardy question using the appropriate content. Create a Jeopardy game to review the key concepts using all of the student-created questions.

Have students create a bulletin board.

Write...

- ... a paragraph about the most meaningful thing they learned today.
- ...a paragraph about the most enjoyable activity of the day.
- ...the step-by-step ways the student solved a problem in class that day.
- ...a paragraph about why what they learned today is important to their lives.
- ...a rap, rhyme, or jingle to describe a new concept they learned today.

Draw a picture...

- ...to show what you did in class today.
- ...to show what you learned in class today.
- ...to show what you need to learn next.

Have students create a content web or mind map of the material learned that day.
Have students engage in any of the post-reading activities as posted on the intranet:
http://intra.cbsd.org/curriculum/reading_strategies/sec_readingstrategies.htm

Self-Assessment. Have students describe their sense of progress towards understanding.

Have students collect their work samples and respond to the following questions:

- How does your work show how you have improved?
- What task or assignment was the most challenging and why?
- Of which selection are you most proud and why?
- Revisit the essential question.

(from Understanding by Design)

Response cards. Students write responses to teacher questioning on a white board or piece of paper and hold up responses.

Whip Around

The whip around is a useful instructional tool teachers can use to check for understanding in a group setting. While the whip around may not provide individual, student-level information about understanding, it is useful in helping teachers determine if they need to reteach content to the group. As such, the whip around is often used as a closure activity at the end of a period of instruction.

The procedure is fairly simple. First, the teacher poses a question or a task; typically, students are asked to make a list of at least three items. Students then individually respond on a scrap piece of paper. When they have done so, students stand up. The teacher then randomly calls on a student to share one of his or her ideas from the paper. Students check off any items that are said by another student and sit down when all of their ideas have been shared with the group, whether or not they were the one to share them. The teacher continues to call on students until they are all seated. As the teacher listens to the ideas or information shared by students, he or she can determine if there is a general level of understanding or if there are gaps in students' thinking.

Third grade teacher Mandi Smith uses the whip around technique as her daily closure activity. During her unit of study on insects, she asked her students to make a list of the characteristics that distinguish insects from other creatures on Earth. She said that she has to be very specific or her 3rd graders will write comparisons with dinosaurs, space people, and other things not found on Earth. As they completed their whip around, Ms. Smith was pleased to learn that the vast majority of her students understood that insects have three body parts, the head, abdomen, and thorax; that insects have eyes and one pair of antennae and mouthparts; that they all have six legs; that their skeleton is an exoskeleton; and that they have an open circulatory system. Ms. Smith noted, however, that the students did not discuss wings, what the antennae do, or how the mouthparts and legs have adapted. She knew that she would need to review this information the following day to ensure that her students grasped it.

Similarly, health educator Stacey Everson uses a whip around at the end of her classroom discussions. During a 9th grade health education lesson, Ms. Everson asked students to identify the risk factors for suicide. After writing individually for several minutes, the students stood up, and Ms. Everson invited them to share one at a time. She analyzed their responses and noted the factors that most students had on their own pages. She also noted areas that were not addressed by students and provided the class with supplemental readings on the topic as well as a yellow ribbon card (see www.yellowribbon.org for details), which provides students with permission to ask for help as well as tells them what to do if someone else uses the help card.

From Checking for Understanding by D. Fisher and N. Frey (2007)



TICKET OUT
OF HERE

**Strategies of Independent Strategic Readers
Supported by this Reading Tool:**

- 1. Have strategies to use when encountering new words.
- 2. Connect new knowledge to make meaning.
- 3. Think ahead to what might be coming.
- 4. Continually evaluate own understanding.
- 5. Create images of what is being read.
- 6. Periodically summarize what is read.
- 7. Use textual cues, visuals, and organization.
- 8. Have a plan for how to approach the task.

HOW TO USE:

- Instruct students to complete a ticket before leaving the classroom.
- Tell them “The Ticket” might be an answer to a specific question provided by the teacher.
- Tell them “The Ticket” should also include a student’s reflection on her learning—with the identification of a question or a clarification that needs to be made for deeper understanding of the new learning.

TIPS / VARIATIONS:

- Use this tool as an informal assessment of the students’ understanding of the day’s reading or discussion. Ask a specific question, have the students identify questions they still have, summarize key points learned today, or predict where their reading will take them.
- Consider using the questions from “Ticket Out of Here” to introduce the next day’s learning. Consider giving the tickets to other students the next day with the goal of their summarizing, clarifying, or answering the question.

TICKET OUT OF HERE

Directions: Give this ticket to your teacher before you leave class today. Be sure you answer the question the teacher asked you, as well as provide a question you would like answered to help you better understand your reading and the class discussion.

Summarize your learning based on the teacher's question.

Note a misunderstanding you would like clarified or a question you have based on the reading or discussion.

TICKET

TICKET OUT OF HERE

Directions: Give this ticket to your teacher before you leave class today. Be sure you answer the question the teacher asked you, as well as provide a question you would like answered to help you better understand your reading and the class discussion.

Why is iron important to our health?

Iron is used in formation of myoglobin—which holds oxygen for muscle tissues—and hemoglobin—which transports oxygen to blood.

TICKET

What can I do to be sure I get enough iron?

TICKET OUT OF HERE

Directions: Give this ticket to your teacher before you leave class today. Be sure you answer the question the teacher asked you, as well as provide a question you would like answered to help you better understand your reading and the class discussion.

TICKET

Name:



Exit Ticket



Some days, you will need a ticket to leave class. How do you get a ticket, you ask? Here's how. Keep this sheet in your binder at all times. When an exit ticket is required, pull this sheet out and answer one of the questions that follow. Some days, I will only ask you to answer in a sentence or two. Other days, a paragraph might be required. Sometimes, the exit ticket will be counted towards for a grade. These exit tickets will help you reflect upon your learning, and they'll help me evaluate my teaching. So get your tickets!

BE SURE TO WRITE THE NUMBER OF THE QUESTION AT THE TOP OF YOUR PAGE.

- 1) Is there a concept or skill that we went over today that you didn't understand?
- 2) What question popped into your head during today's lesson? Is there something further you would like to know?
- 3) What was the most challenging part of today's lesson? Why?
- 4) Who made a comment or question today that was very helpful/insightful? What was the comment/question? Why did it strike you?
- 5) How could what you learned today be useful in the real world? Why do you need this skill in the real world?
- 6) Can you make any connections from what you learned in class today to what you've learned in another class? Explain.
- 7) If you were the teacher today, what would you add to today's lesson? Why?
- 8) If you were the teacher today, which part of today's lesson would you take out? Why?
- 9) Is there a song or movie that you can link to today's lesson? Explain.
- 10) Do you feel like a better person because of today's lesson? Explain.
- 11) Explain today's lesson in your own words.
- 12) There are many ways to reflect upon your learning. Feel free to create and answer your own question.



ONE WORD TO
SUM IT ALL UP

**Strategies of Independent Strategic Readers
Supported by this Reading Tool:**

- 1. Have strategies to use when encountering new words.
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- 3. Think ahead to what might be coming.
- 4. Continually evaluate own understanding.
- 5. Create images of what is being read.
- 6. Periodically summarize what is read.
- 7. Use textual cues, visuals, and organization.
- 8. Have a plan for how to approach the task.

HOW TO USE:

- Challenge students to read the assignment with the goal of summing up their learning with a single word *and* supporting their word choice with converging evidence.
- After students read the sources, have them identify the word.
- Have students then share the evidence that supports their choice.
- Finally, ask students to summarize the evidence by reflecting on their thinking and new learning.

TIPS / VARIATIONS:

- After students have completed their own work, have them pair with a learning partner to discuss their choices. Encourage them to discuss how their choices are similar or different and why. Encourage them to talk about the support they constructed for their word.
- As students share their word and support, ask them to reflect aloud on how their word is alike or different from their classmates' words and why.

ONE WORD TO SUM IT ALL UP

Topic: _____

Because the book says

Summarize key support for the one word that sums this all up.

Because _____
(resource) says

Consider reading a digital resource and determine its support for your summary word.

Identify one word that you believe is key to summarizing the key learnings of these readings.

Because _____
(another resource) says

Consider reading another print resource and determine its support for your word.

Because I believe/think/know

It's always important to reflect on your learning and be able to construct support for your thinking. Summarize that reflection here.

ONE WORD TO SUM IT ALL UP

Topic: The 50s

Because the book says

- Seen as laid-back happy time
- Cold War—fear of Russia and their power; China became Communist
- Joe McCarthy—Communist search—the Constitutional rights of people were not assured
- Atomic threat
- “American Dream”—own a house, a car, a dog—“Keep up with Joneses”
- Television gave idyllic view of perfect family—white, of course.
- Rock and Roll came out of the gospel music and blues of the African Americans, and parents saw it as rebellion by their kids.
- Segregation and racism were everywhere.
- CIA was created to fight Communism.

Because Literary Kicks
(resource) says

- Kerouac
- On the Road, cross-country events, rejected 7 years before published
 - Wrote about his own suffering, wild city life, and old world family values (The Town & The City)

Paradox

Because www.pbs.org
(another resource) says

- Operation WetBack
- deport Mexican Americans—1 million
 - Mexican-looking citizens were stopped and asked for identification

Because I believe/think/know

- While it appeared to be like “Happy Days” on TV, there were lots of things that were not supporting the American Dream:
- Cold War
 - Joe McCarthy
 - Segregation
 - Racism

READING STRATEGIES FOR THE CONTENT AREAS
POSTREADING ACTIVITIES

ONE WORD TO SUM IT ALL UP

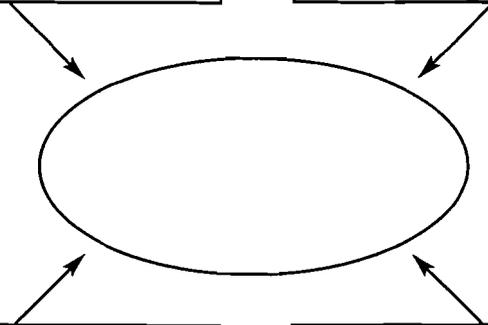
Topic: _____

Because the book says

Because _____
(resource) says

Because _____
(another resource) says

Because I believe/think/know





NEGOTIATE
YOUR LEARNING

**Strategies of Independent Strategic Readers
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- 1. Have strategies to use when encountering new words.
- 2. Connect new knowledge to make meaning.
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- 4. Continually evaluate own understanding.
- 5. Create images of what is being read.
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- 8. Have a plan for how to approach the task.

HOW TO USE:

- Have students summarize on note cards or stick-on notes three to five key learnings from their reading. Instruct them to enter one key learning on each card.
- Pair students to discuss key learnings and to “negotiate” summarizing those learnings on two to four note cards or stick-on notes.
- Have students gather in groups of four to discuss their key learnings and to summarize them on one to three note cards or stick-on notes.
- Have students share their small-group summaries with the class as a whole.

TIPS/VARIATIONS:

- Use this tool at the end of a reading assignment or after reading several assignments to summarize key information learned.
- Encourage students to talk about their learning with their peers because it strengthens their understandings and gives them opportunities to listen to and persuade others.
- Have students complete the initial summary in class before discussing the assigned reading or give it to them as a summarizing activity to be completed at the end of the reading or as homework.

NEGOTIATE YOUR LEARNING

Directions: Summarize one key learning on each note card or stick-on note.

Summarize a key learning from your reading on each note card or stick-on note.

Be prepared to discuss your choices with a classmate and determine together support for two to four common learnings.

Remember that talking about your key learnings helps strengthen your understanding and increases chances of retaining the learning in long-term memory.

“Square up” with another pair of learners. Discuss your key learnings and “negotiate” to share with the entire class one to three of the most important learnings.

NEGOTIATE YOUR LEARNING

Directions: Summarize one key learning on each note card or stick-on note.

A virus is not considered to be a living organism by most scientists because

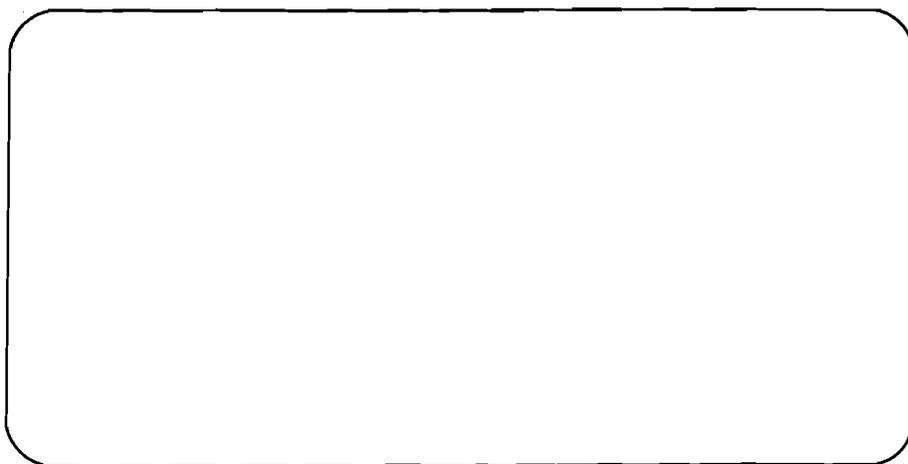
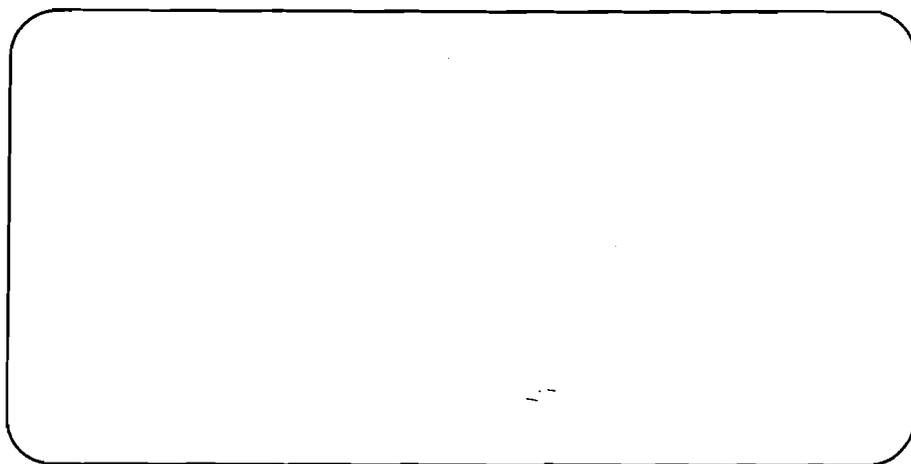
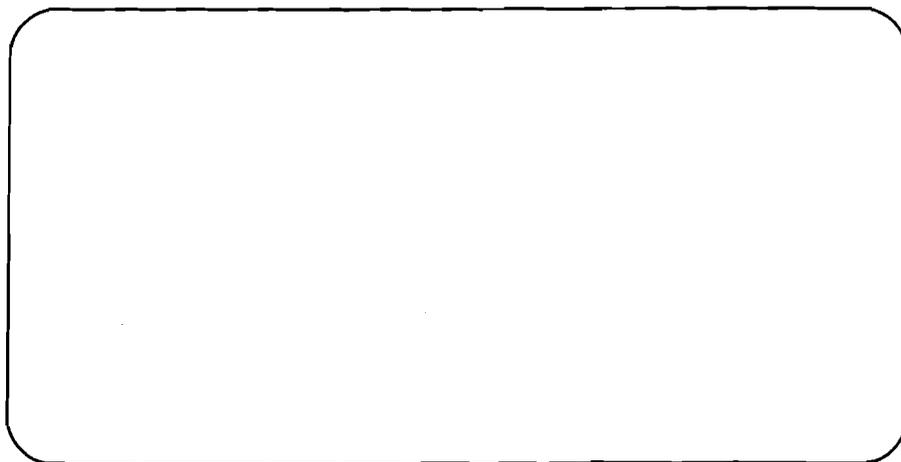
- It is not even a cell.
- It can only reproduce by “invading” other cells.
- It doesn’t “eat” food for energy.
- It doesn’t grow.

While bacteria can be helpful, viruses are always harmful. (e.g., chicken pox, HIV, measles, colds, flu, mumps)

Viruses are considered to be alive by some because (1) they have DNA, which is the code for life; (2) they do reproduce—but through other cells; (3) they change their DNA to stay alive.

NEGOTIATE YOUR LEARNING

Directions: Summarize one key learning on each note card or stick-on note.





Temperature in Celsius and Fahrenheit

❖ Learning the Strategy

Think fast! You'll have just one minute to write a paper on the significant points, unanswered questions, and new connections from your reading selection. This is great way to focus quickly on the most important concepts from your text. And you'll make some real-world connections with your reading, too.

☀ Practicing the Strategy

1. Read the text provided.
2. Use your Minute Paper Worksheet to focus on the following points as you read:
 - Significant Points and Key Terms
 - Unanswered Questions — what they still need to know to be successful
 - Ah-ha's for Application — new ideas; ideas for how and where this next concept applies in other contexts
3. With a reading partner, discuss the most significant points you learned, your unanswered questions, and your ah-ha's for application.
4. Now, when your teacher says "Go," take one minute to write a paper on your reading.
5. Share your results with your partner and listen to your partner's minute paper results. Compare notes, questions, significant points, ah-ha's.
6. Now, use your new learning to solve the given problem.



Temperature in Celsius and Fahrenheit

The Swedish physicist and astronomer Anders Celsius, who lived in the first half of the 18th century, is considered the first person to use Celsius measurement based on the metric unit. Temperature in Celsius defines the freezing point of water as zero degrees Celsius and the boiling point as 100 degrees Celsius.

Dr. Daniel G. Fahrenheit, a German scientist who lived from 1686 to 1736, worked with temperature as well. He believed the temperature of the human body to be 100 degrees, but he was off

about 1 degree. He found that water freezes, according to his scale, at 32 degrees. On the Fahrenheit scale, water boils at 212 degrees.

Only Americans need to worry about converting from Fahrenheit to Celsius, as they are the only ones to use this scale. All other countries use Celsius. To convert from Fahrenheit to Celsius, subtract 32 degrees and multiply by $\frac{5}{9}$. To convert from Celsius to Fahrenheit, multiply by $\frac{9}{5}$ and then add 32 degrees.

Application

Use the text to solve this problem:

Convert the following temperatures from Fahrenheit to Celsius.

Fahrenheit = Celsius

70 degrees –

30 degrees –

46 degrees –



Sample Solution

Application

Use the text to solve this problem:

Convert the following temperatures from Fahrenheit to Celsius.

Fahrenheit = Celsius

70 degrees –	20.9
30 degrees –	-1.1
46 degrees –	7.7

Minute Paper

Significant Points

To convert from Fahrenheit to Celsius, subtract 32 degrees and multiply by 5/9. To convert from Celsius to Fahrenheit, multiply by 9/5 and then add 32 degrees.

70 degrees Fahrenheit = 20.9

70 – 32 = 38

38 X .55 (5/9) = 20.9

Unanswered Questions

How do I multiply using fractions to complete this exercise? I have forgotten.

Ah-ha's for Application

Only Americans have to learn this conversion since they are the only ones using Fahrenheit to measure temperatures.



Significant Points

Unanswered Questions

Ah-ha's for Application



My Minute Paper