

# Literacy T-Chart – Concept Map (Clustering, Webbing)

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## CIP 51.0801 Medical/Clinical Assistant

### Organize information to address a question

Program Task:	PA Core Standard: CC.3.5.11-12.G
402: Identify the interrelationship between agent, host and environment in health and illness.	Description: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

Program Associated Vocabulary:	Reading Associated Vocabulary:
Epidemiology Causation Epidemiologic triad or triangle Infectious disease Agent Host Environment Infectious microorganism or pathogen Risk factors Rothman’s Causal Pies Model Sufficient cause Necessary cause	Main Idea Supporting Detail Hierarchy Focus Question

Program Strategy:	Literacy Strategy:
<p>Use the concept map strategy to ensure that students develop an understanding of the hierarchal relationships among concepts and details. It is especially helpful for visual learners so that they can see the relationships. In this example, the center of the concept map starts with the epidemiologic triangle.</p> <p>After you have introduced the concept map strategy, present students with the activity below.</p> <p><i>Using the concept map strategy with the epidemiologic triangle, conduct research on</i></p>	<p><i>Whole Group</i>            Review with students how important it is to differentiate main ideas and supporting details. Explain that the concept map of clustering or webbing clearly shows relationships among ideas.</p> <p>Show an example of a cluster map and lead a discussion of how to determine which ideas are most important or higher on the hierarchy.</p> <p>Provide students with a focus question: What traits do employers value? Show them a list of related items.</p>

## Program Strategy:

*chickenpox. Web each factor/cause on the agent ("What"); the host ("Who"); and the environment ("Where"). Answer the following question:*

*Describe the chickenpox vaccine and its level of success in preventing the disease. Which side of the epidemiological triangle does it break? Use this concept map to organize an informational essay under 500 words.*

This task would be completed after students have some understanding of agents, hosts and environment.

You may choose to have students work together as teams or work individually to develop the concept maps. However, the writing task should be completed individually.

You may choose to have each student or team research a different disease, then discuss similarities and differences.

After the concept maps have been completed, post them in the classroom for feedback by other students. A scoring guide is included.

Student writing should follow the guidelines for an informative essay. You may, however, choose a different format by having students create a PowerPoint presentation, poster, brochure or other document to be used for different audiences.

## Literacy Strategy:

On time	Responsibility	Friendly	Clean
Learner	Smiles	Good grammar	Follows rules
Efficient	Finishes tasks	Focused	Good manners
Respects authority	Skillful	Listens well	Works hard
Soft skills	Good worker	Good with customers	

Ask students to identify terms that could serve as group headings for others. Then have students group the remaining terms under one of the main points. Students should be able to transfer this information to a web at this point with a central circle, three to four main ideas and the remaining details spread out from each main idea.

### *Guided Practice*

Divide students into two or more groups. Provide each group with an article that is clearly organized. Articles should be related to the same topic. Good sources would be trade publications related to your program.

Have students use sticky notes to arrange the points in hierarchal fashion. Once they are satisfied with the organization, have them transfer to a web.

Once they have completed the first version of their web, provide a video on the same topic. Have them add information to their webs from the video.

Have students compare their webs to create one web that covers all sources. This may involve adding points or paraphrasing others. Have students number their articles and use that numbering to note the source for items on the web.

Review webs with students by asking the following questions:

- Are the concepts and relationships correct?
- Are important concepts missing?
- Are any misconceptions apparent?
- Was the map laid out in a way that higher order relationships are apparent and easy to follow?
- Is it neat and orderly?

### *Application*

As students locate articles, experiment, visit websites or watch videos related to the assigned

Program Strategy:	Literacy Strategy:
	<p>task, they develop a concept map. Students add to maps or make additional connections as they continue to research. Well-organized maps will facilitate students completing the writing task as the organization is already evident.</p> <p>In debriefing, use the following questions:</p> <ul style="list-style-type: none"> <li>• How did you (your group) decide which were main ideas and which were supporting details? Think about your thinking – Why did you categorize them the way you did?</li> <li>• Why is it helpful to organize notes this way?</li> <li>• How does this make writing easier?</li> </ul> <p>Listen for:</p> <ul style="list-style-type: none"> <li>• Understanding why knowing the difference in key ideas and supporting details is important.</li> <li>• It is important to have these notes for writing and studying for tests.</li> <li>• This activity makes writing easy since the organization is already done.</li> </ul>

## Instructor’s Script – Concept Map

Since many students are visual learners, the concept map provides a way to graphically display relationships. For students to be able to apply information, they must be able to differentiate among key ideas and supporting details. Clustering or webbing provides a structure for creating hierarchies of ideas in a visual manner.

### Common Mistakes Made by Students

Students often confuse key ideas and supporting details, especially in texts that do not have the topic sentence or main idea in the first sentence in a paragraph.

At a higher level, students sometimes do not see links across similar concepts. Concept maps allow students to “see” those connections.

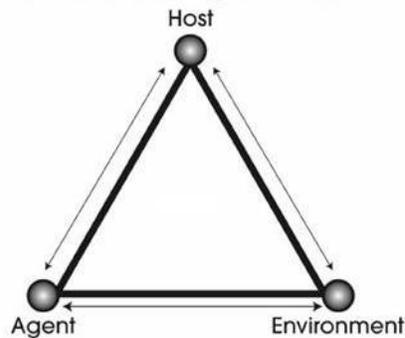
Students sometimes try to include too many details in their maps. It is important to demonstrate that they need only a few words to make the links.

### CTE Instructor’s Extended Discussion

Have students complete a presentation for middle school students. The [CDC: BAM! \(Body and Mind\)](#) website provides infectious disease information targeting this age group. Visual maps can help to ensure students understand the interrelationships among agent, host and environment in health and illness. These maps can also help them associate the appropriate elements for each function. Have students save the maps in their journal or notebook as a study guide or for future reference.

The CDC website has more background information on [chickenpox](#) for you or advanced students.

Information on many diseases and public health issues is listed alphabetically at this [CDC website](#).



### Performance Descriptors

Rating	Performance Descriptor
4	Concept map clearly shows all three vertices of the epidemiologic triangle: agent, host, environment. Information is correct. Students clearly and accurately describe the interaction and interdependence of all of the vertices of the epidemiologic triangle.
3	Information shows three vertices of the epidemiologic triangle: agent, host, environment. However, information may be incomplete for one or more vertices. Students describe the interaction and interdependence of most of the vertices of the epidemiologic triangle.
2	Concept map shows information on at least two of the vertices of the epidemiologic triangle. Information may be incomplete for one of the vertices listed. Students describe the interaction and interdependence of two of the vertices of the epidemiologic triangle.
1	Concept map shows only one vertex of the epidemiologic triangle.

## Sample Questions

### Career and Technical Concepts

Question	Answer
In the definition of epidemiology, "determinants" generally do NOT include A. Agents B. Causes C. Control measures D. Risk factors	C. Control measures  In the definition of epidemiology, "determinants" generally include the causes (including agents), risk factors (including exposure to sources) and modes of transmission, but do not include the resulting public health action.

### PA Core Reading Concepts

Question	Answer
You are researching the focus question: How do I write an effective resume? After consulting several sources on the topic of writing a resume, which of the following notes should be a key idea to organize your notes before writing? A. References B. Contact information C. Tailored to the job D. Tailored to your age	C. Tailored to the job