word knowledge **sample lesson** Semantic Mapping

ACKNOWLEDGMENTS

Based on Heimlich, J. E., & Pittelman, S. V. (1986). *Semantic mapping: Classroom applications*. Newark, DE: International Reading Association.

TERMS TO KNOW

Criteria chartA list of standards that define and clarify a task or assignment. This list
should be brainstormed and developed with your students.RubricA scoring guide in which the standards from the criteria chart are assigned a
point value

INTRODUCTION

The following sample lesson is based on the short story *The Ghost of the Lagoon* by Armstrong Sperry. Semantic mapping can be used with simple or advanced concepts and is equally effective with both narrative and expository text.

OBJECTIVE

The students will associate new word meaning with prior knowledge through the use of a semantic map.

MATERIALS

- Text (narrative or expository).
- Overhead projector, chalkboard, or chart paper.

PREPARATION

Preview the text, looking for academic words, or challenging words that students are likely to see and use often in academic settings. Identify content-specific words that students must know in order to understand the text.

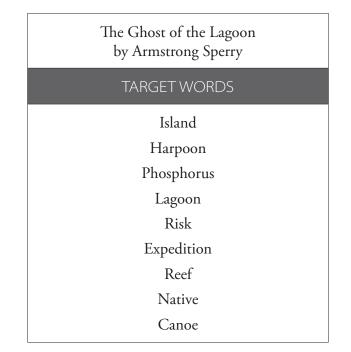


FIGURE 56. SAMPLE WORD LIST.

Sperry, A. (1984). The ghost of the lagoon. In C. G. Waugh & M. H. Greenberg (Eds.), The Newbery Award Reader: A collection of short fiction by writers who have won the John Newbery Medal (pp. 261–270). Orlando, FL: Harcourt Brace Jovanovich.

DAILY REVIEW

Teacher:

Yesterday we talked about people we know or have read about who are brave. Who is one person we talked about, Philip? Why was he or she brave?

Accept and briefly discuss responses.

What is one thing a brave person might do? Can anyone think of another word for *brave*?

STATE OBJECTIVE/PURPOSE

Teacher:

Today we are going to create a semantic map. Researchers tell us that knowledge is stored in your brain in categories or groups. Words in your memory are linked to other words based on their relationships. So, if you can connect a new word with a word you already know, you will be better able to remember the new word. I'm going to show you how to go through this process today by developing a semantic map. First, I want to introduce you to our story.

We will read *The Ghost of the Lagoon* by Armstrong Sperry. This is a story about a courageous boy, Mako, who lives on the island of Bora Bora. An island is a piece of land surrounded by what? Yes, water. What are some bodies of water that could surround an island?

Accept responses. When a student gives the answer "sea," write "SEA" on the board (or overhead) or just tell the students that in this story the island is in the sea.

MODEL AND TEACH

Genre: Narrative or expository **Grouping:** Whole class

1. Ask students to brainstorm or think of words related to the sea. List all of the words on one-half of the board (or overhead). Write down all appropriate student responses.

Ask questions to lead students to say target words from the story. For example, if you want students to add *risk* to the list, you might ask, "Sara, you said the sea could be dangerous. What is another word for *danger*?" If you want to add *harpoon*, you might ask, "Does anyone know the name of a spear used to kill sea animals?"

Some target words may be unknown to students. Add unfamiliar words to the list and give a brief definition for each.

Here is what the board (or overhead) might look like at this point:

Figure 57. Sample Semantic Map: Phase 1.

water ocean island shark whale fish beach shells dangerous starfish blue boat ship waves surfing reef nature risk coral algae adventure

SEA

Harpoon — *spear-like weapon used to kill fish*

Phosphorus — glowing substance

Lagoon — shallow water separated from the sea by coral reefs or sandbars

- 2. Draw a circle with the topic in the middle.
- 3. Read through the list of brainstormed words and model how to come up with categories to group the words. Think aloud.

Teacher:

I see the words *starfish*, *sharks*, *whales*, *coral*, *algae* ... What do these words have in common? They are not all animals, but they are all living. We could have a "sea life" category.

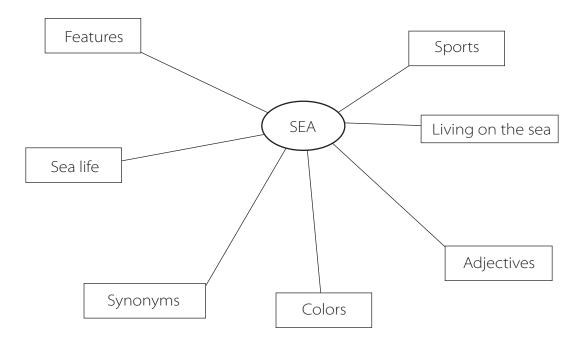
3. Ask students to come up with categories. Write each category in a circle and connect it to the topic.

4. If students have difficulty generating categories, you may need to think aloud and model how to come up with categories several times. You may need to start with a few words at a time. For example:

Teacher:

Let's look at a few words together. Would *shark* and *beach* be in the same category? Well, a shark lives in the sea near a beach, but they are not really in the same category. How about *shark* and *starfish*? Yes, both sharks and starfish are animals that live in the sea. So, raise your hand if you can think of a category that both shark and starfish would belong to? Yes, sea animals or sea life would be a good category. Look at our list of words, and raise your hand if you see any other words that would fit into this category...

Figure 58. Sample Semantic Map: Phase 2.



Based on Heimlich, J. E., & Pittelman, S. V. (1986). Semantic mapping: Classroom applications. Newark, DE: International Reading Association.

GUIDED PRACTICE

Grouping: Partners

- 1. Assign partners.
- 2. Have pairs copy the map. Then ask pairs to generate any remaining category titles and to categorize the brainstormed words.
- 3. Ask students to come up with additional words for each category.
- 4. Circulate around the room and be available for guidance and feedback. Check in with each pair of students to check for understanding. Be prepared to model again if needed.

5. Ask pairs to add a blank category to their log to fill in after they read the story or chapter.

On the following sample master map, the target vocabulary words are in bold.

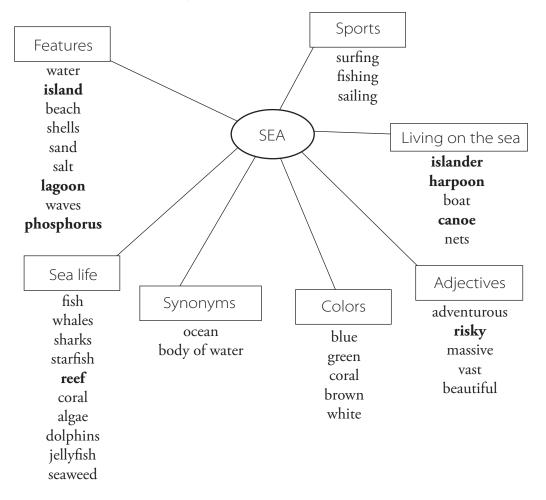


Figure 59. Sample Semantic Map: Phase 3.

As you circulate around the classroom, ask leading questions to guide student responses. For example, if you hear one pair of students talking about features of the sea, ask them, "Which one of our new words is a feature with shallow water?"

- 6. Return to the map on the board and whole-class grouping.
- 7. Ask for student responses to each category and write appropriate responses on a master map. Allow students to add words to their maps based on class discussion and the master map.

READ SELECTION

Grouping: Partners, small group, or whole class

Read the selection: *Ghost of the Lagoon*. Remind students to be aware of target words in the reading and to look for other categories they might want to add to their maps.

Grouping: Partners

- 1. When the class is finished reading the selection, return to the master map on the board (or overhead).
- 2. Discuss the concepts included in the reading. Add new concepts learned during reading such as expedition and native (see following sample map).
- 3. Ask students whether they discovered any other categories, or groups of things with common characteristics, in the reading. If needed, think aloud for the class.

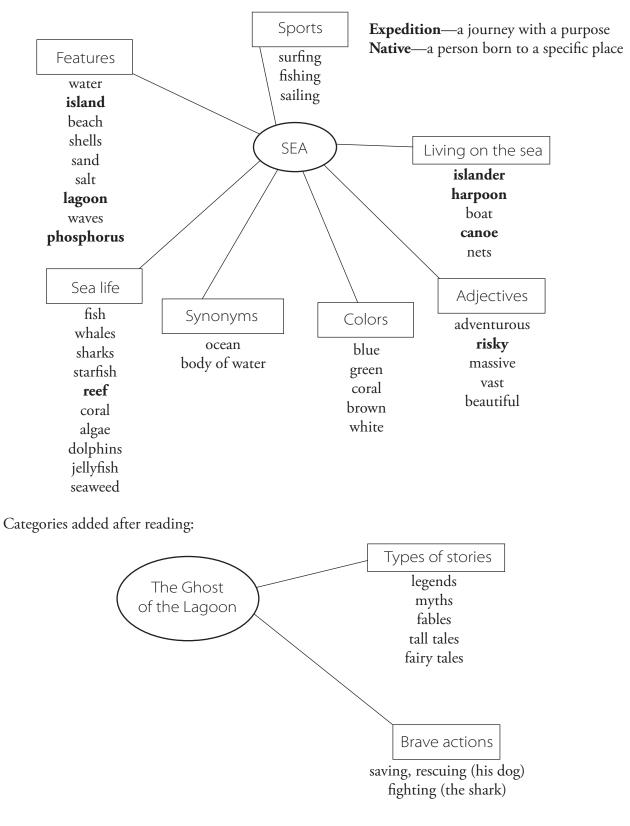
Teacher:

Mako was brave several times during the story. So, we could have a category labeled "Brave Actions". Now, find a word in the story that is a brave action.

Call on students and write responses under the category Brave Actions.

- 4. Continue to ask students for examples of new categories.
- 5. Have students work with partners to fill in examples under each new category.
- 6. When students are finished, ask for responses and discuss. See the following sample of a completed map and additional categories brainstormed after reading.

Figure 60. Completed Sample Semantic Map.



- 1. Before reading a passage or selection, preview the text for challenging words that students will use and see often (see procedure at the beginning of this lesson).
- 2. Tell students the topic of the reading passage or selection and lead students to brainstorm a list of words related to the topic. Discuss background knowledge of the topic and help students make connections between what they already know and what they will learn while reading.
- 3. Working in small groups or partners, ask students to create a semantic map by categorizing the brainstormed list of words. This includes generating logical category titles and placing words in appropriate categories.
- 4. Return to whole group and discuss students' maps.

GENERALIZATION

Teacher:

Can anyone think of a way we might use a semantic map in our other classes?

Student:

Sometimes our social studies teacher gives us lots of new words to learn.

Teacher:

How could a semantic map help you understand your social studies reading?

Student:

We could put all the new words in a semantic map.

Teacher:

What would that look like? What would be the first step? Think about our *Ghost of the Lagoon* map.

Student:

We wrote the word in the middle first.

Teacher:

That's right. The word in the middle represents the topic of the reading—one word that tells what the reading is about. What are you reading about in social studies right now?

Student:

We're reading about Martin Luther King Jr. and Rosa Parks.

Teacher:

Good. So, the topic of your semantic map could be civil rights. Let's quickly brainstorm some words related to civil rights so you can get an idea of how this might look in your other classes.

MONITOR STUDENT LEARNING

Check maps for completion and check that words are accurately matched with categories.

Give students a list of the target vocabulary words along with a few other words from the map. Ask students to write a story that includes 10–12 of the words on the list. Check that students are able to use the words correctly in their writing.

Figure 61. Sample Vocabulary Writing Assignment.

Name of Selection:

Ghost of the Lagoon

Directions:

Look at the words below. Write a story that includes 10–12 words from the list. Underline each word in your story.

Vocabulary Word List:

island, lagoon, risk, expedition, native, canoe, phosphorus, harpoon, shark, beach, sea, adventure, massive, waves, coral reef

Your Story:

HELPFUL HABIT

Struggling readers are usually struggling writers. In order to encourage your students to write creatively, do not penalize students for every writing error. Make a **criteria chart** with students for this assignment, such as the one in Figure 62. Make it clear that there will be no penalty for spelling errors, except for the words on the list and frequently occurring words for which they are responsible, such as *what*, *who*, and *they*. A list of these everyday words may be posted in the room or in students' folders. Tell the students that you expect them to practice spelling the vocabulary words on the new list correctly.

Figure 62. Sample Criteria Chart for Vocabulary Writing Assignment.

Criteria for Writing Assignment

- The story has a beginning, middle, and end.
- The story uses 10–12 of the words on the list (vocabulary words).
- The vocabulary words are underlined in the story.
- The vocabulary words are spelled correctly.
- All sentences start with a capital letter and end with a period, question mark, or exclamation point.
- The story is interesting and fun to read.
- The vocabulary words and our everyday words are used correctly.

Develop a **rubric** (see Figure 63) based on the criteria chart that can be used to grade students' writing.

FIGURE 63. SAMPLE RUBRIC FOR VOCABULARY WRITING ASSIGNMENT.

Rubric for Writing Assignment	
The story has a beginning, middle, and an end.	10 pts
Each sentence starts with a capital letter and ends with a period, question mark, or exclamation point.	25 pts
Vocabulary Words	
10–12 included	10 pts
Underlined	10 pts
Spelled correctly	10 pts
Used correctly	25 pts
Everyday words spelled correctly	10 pts
TOTAL	100 pts

PERIODIC REVIEW/MULTIPLE OPPORTUNITIES TO PRACTICE

When introducing a new concept, follow the semantic mapping procedure. Semantic mapping helps students understand the connections between words by organizing them visually on a map. This is an excellent instructional activity for use in content areas.