

Kinesthetic Word Webs

Strategy Overview

Movement is crucial to learning. We must move because the “sit-and-get” method is overused and not as effective as when we have the chance to increase our oxygen intake and shift the activity. Although there is no exact science as to the number of minutes that elapse before we should move or change direction, no more than 20 minutes is an adequate amount of time for learning to occur before we do something with what was learned (Schenck 2005). Our working memory can only hold so much information before it becomes fatigued or bored (Sousa 2006). Thus, implementing the suggested 20-minute time frame into teaching should help teachers to remember the importance of chunking material and allowing time for the brain to process material being learned.

We know what a web is on paper, but what is a Kinesthetic Word Web? It is a strategy that gets students up and moving with the content of the lessons. Picture a word web on paper. Now turn the outer ovals on the word web into students and imagine their arms touching the person’s shoulder in the center oval. That is a Kinesthetic Word Web.

Strategy Insight

The Kinesthetic Word Web strategy is designed to take a paper-and-pencil activity and add movement and challenge to raise the level of engagement. As Wolfe and Brandt (1998) stated, “The brain likes a challenge!” It seeks patterns. Patterns are required during this strategy in order to be successful.

Teacher Notes

- Be sure every student has a card. Do not worry about every student fitting into a word web. If a student cannot be a part of a Kinesthetic Word Web because his or her word has already appeared in the web or because there was not an exact number of students for each set, they can explain where they would go and why.
- **Caution:** Some students do not like to be touched, so knowing students and their backgrounds is very important. As an alternative, they can each place a fist on a hip and connect elbow to elbow; they can extend a leg and touch foot to foot; or you can provide 15 inches of string to each student with the center student holding one end of all the strings.

Kinesthetic Word Webs

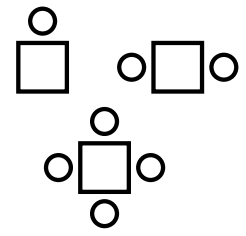
Strategy Overview *(cont.)*

Teacher Notes *(cont.)*

- Feel free to give some students a nonexample. The nonexamples may decide to stand outside a Kinesthetic Word Web for which they are a nonexample or stand apart from all of them if they do not see how they belong to any Kinesthetic Word Web.
- Due to students' own rationales, be aware that the Kinesthetic Word Webs may not form as originally designed at the synthesis level, yet they still work! This is because students may find an alternate connection or justify how they are a nonexample.

Kinesthetic Word Webs

Lesson Framework



Strategy Overview

This strategy turns a web graphic organizer into an activity that incorporates movement. With this strategy, teachers provide students with content information on index cards and students create a Kinesthetic Word Web.

Materials

- index cards
- *Word Web* (page 61)

Procedures

1. Prior to the lesson, write the lesson's main topic on an index card. For example, in a lesson on weather, the word *weather* would be the main topic.
2. Choose two to five words or phrases related to the main topic and write one word or phrase on each index card. Create multiple sets of index cards so that each student will get one. In the example of weather, one of the following may be on each index card:

icy

sunny

snowy

chilly

rainy

Model

3. Provide a hook for the lesson by creating a way to get students excited about the lesson topic, such as accessing their background knowledge with a compelling question, making the topic relevant to them, or creating an air of mystery.
4. As a class, create a web graphic organizer about any topic that they are interested in and display the web so that it is visible for all students.
5. Provide three to five students with index cards, using content from the created web. Be sure one of the cards has the main topic (center oval) on it.
6. Instruct these students to model a Kinesthetic Word Web by circling around the student holding the main topic card. With a straight arm, have students place one hand on the shoulder of the student holding the main topic to show they are related.

Apply/Analyze

7. Distribute to each student one of the index cards created prior to the start of the lesson.
8. Instruct students to walk around the room looking for words related to the words they have and to the main topic. For example, if Student A has *sunny* and they find Student B with *snowy*, they connect together and continue to find more words.

Kinesthetic Word Webs

Lesson Framework *(cont.)*

Procedures *(cont.)*

Apply/Analyze *(cont.)*

9. Once a group believes they have found all of the words, have students form an outer circle and have the main-topic person stand in the middle. The outer circle of students places one hand on the shoulder of the student with the main topic, creating a Kinesthetic Word Web.

Evaluate

10. Repeat steps 7–9, but this time remove some of the main-topic index cards and some of the detail index cards, and replace them with Wild Cards (blank index cards). Ask students to find to which group they belong. Those with Wild Cards can join any group by writing a detail on their cards that places them with an appropriate web. Students with Wild Cards must be able to justify their answers. Have students share with each group how they decided where they belong and why.
11. Debrief with students by discussing questions, such as the following:
 - If the main topic was not on an index card, could you still create your own?
 - Did you discover any words that could appear in multiple webs?



Checkpoint

Create

12. Divide students into small groups and have them complete their own *Word Web* (page 61) on a related topic from the lesson. Using index cards, instruct students to write each word or phrase from their web. After each group has completed its set of index cards, collect all of them and randomly redistribute them, providing one card to each student.
13. Have each student walk around the room looking for words related to the word that he or she has and to the main topic. Once a group of students believes they have found everyone, with no duplicates, have them form an outer circle and each place one hand on the shoulder of the student with the main topic, creating the Kinesthetic Word Web.
14. Debrief with students by asking questions, such as the following:
 - What other words could you add to the web?
 - What if we were to add more words to the details or related topics—what could those words be?

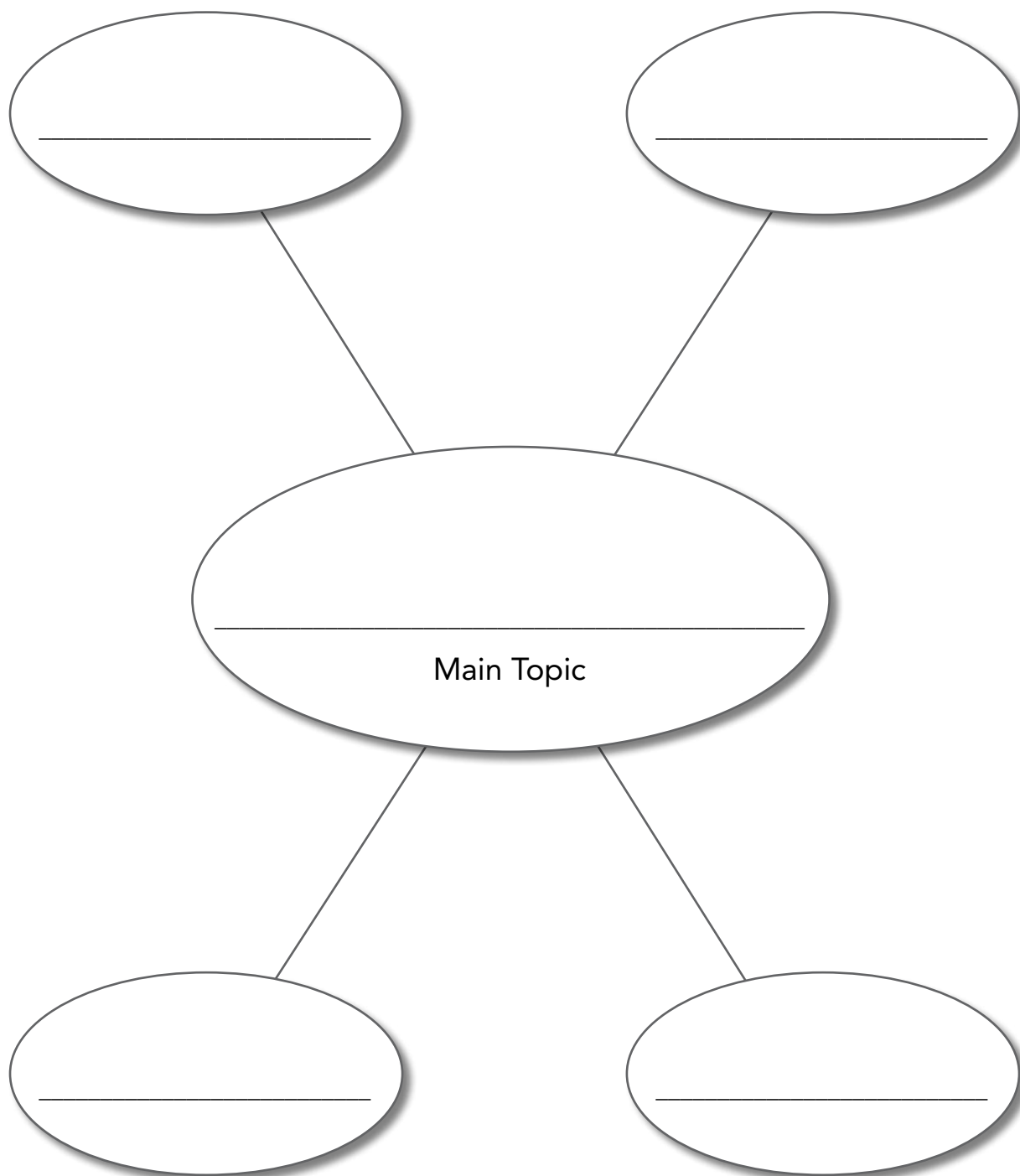


Checkpoint

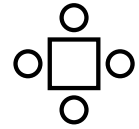
Name: _____

Word Web

Directions: Write a vocabulary word in the middle of the word web. Record other words or phrases related to that word in each outer oval.



Plants



K–2 Lesson

Standard

Knows that plants have features that help them live in different environments

Lesson Overview

This lesson allows students to use the *Kinesthetic Word Webs* strategy while incorporating movement as they discover the features that plants have.

Materials

- index cards
- book about plants (e.g., *The Tiny Seed* by Eric Carle)
- chart paper
- *Plants Word Web* (page 64)

Procedures

1. Prior to the lesson, create sets of index cards with the following words: *plants*, *stem*, *leaf*, *roots*, *seed*, and *flower*. There should be enough sets so that each student receives a card.

Model

2. Read the selected book about plants to students.
3. On a sheet of chart paper create a replica of the *Plants Word Web* (page 64). Then for each oval, have students help brainstorm parts of a plant that corresponds to the word *plants* in the center oval.
4. Have students model a Kinesthetic Word Web by circling around the student holding the main topic card. With a straight arm, have students place one hand on the shoulder of the student holding the main topic to show that they are related.

Apply/Analyze

5. Distribute one index card to each student.
6. Instruct students to walk around the room looking for words related to their words and to the main topic, plants. For example, if Student A has *stem* and they find Student B with *roots*, they walk together and continue to find more related index cards.
7. Once a group of students believes they have found all of the words in the web, with no duplicates, instruct them to form an outer circle and have the student holding the main topic, *plants*, stand in the middle. The outer circle of students each places one hand on the shoulder of the student with the word *plants*, creating a Kinesthetic Word Web.
8. Debrief with students by discussing questions, such as the following:
 - How did you know where you belong?

Plants (cont.)

Procedures (cont.)

Evaluate

9. Repeat steps 5–8, but this time remove some of the detail index cards and replace them with Wild Cards (blank index cards).
10. Ask students to find to which group they belong. Those with Wild Cards can join any group by writing details on their cards that place them with an appropriate web. Students with Wild Cards must be able to justify their answers.
11. Have students share with each group how they decided where they belong and why.
12. Debrief with students by discussing questions, such as the following:
 - How did you decide which group to join?
 - Was it easier or harder with some of the blank cards? Why or why not?



Checkpoint

Create

13. Distribute copies of the activity sheet *Plants Word Web* (page 64) to students. In small groups, have students complete the activity sheet. They should add more details on what they know about plants, such as the need for soil and oxygen.
14. Using index cards, instruct students to write each word or phrase from their activity sheets. After each group has completed its set of index cards, collect all of them and randomly redistribute them, providing one card to each student.
15. Have each student walk around the room looking for words related to the word that he or she has and the main topic. Once a group of students believes that they have found everyone, with no duplicates, have them form an outer circle and each place one hand on the shoulder of the student with the main topic, creating the Kinesthetic Word Web.
16. Debrief with students by asking questions, such as the following:
 - How did you know you belonged to that group?
 - What other words could you add to the web? If we were to add more words to the details or related topics—what would they be?

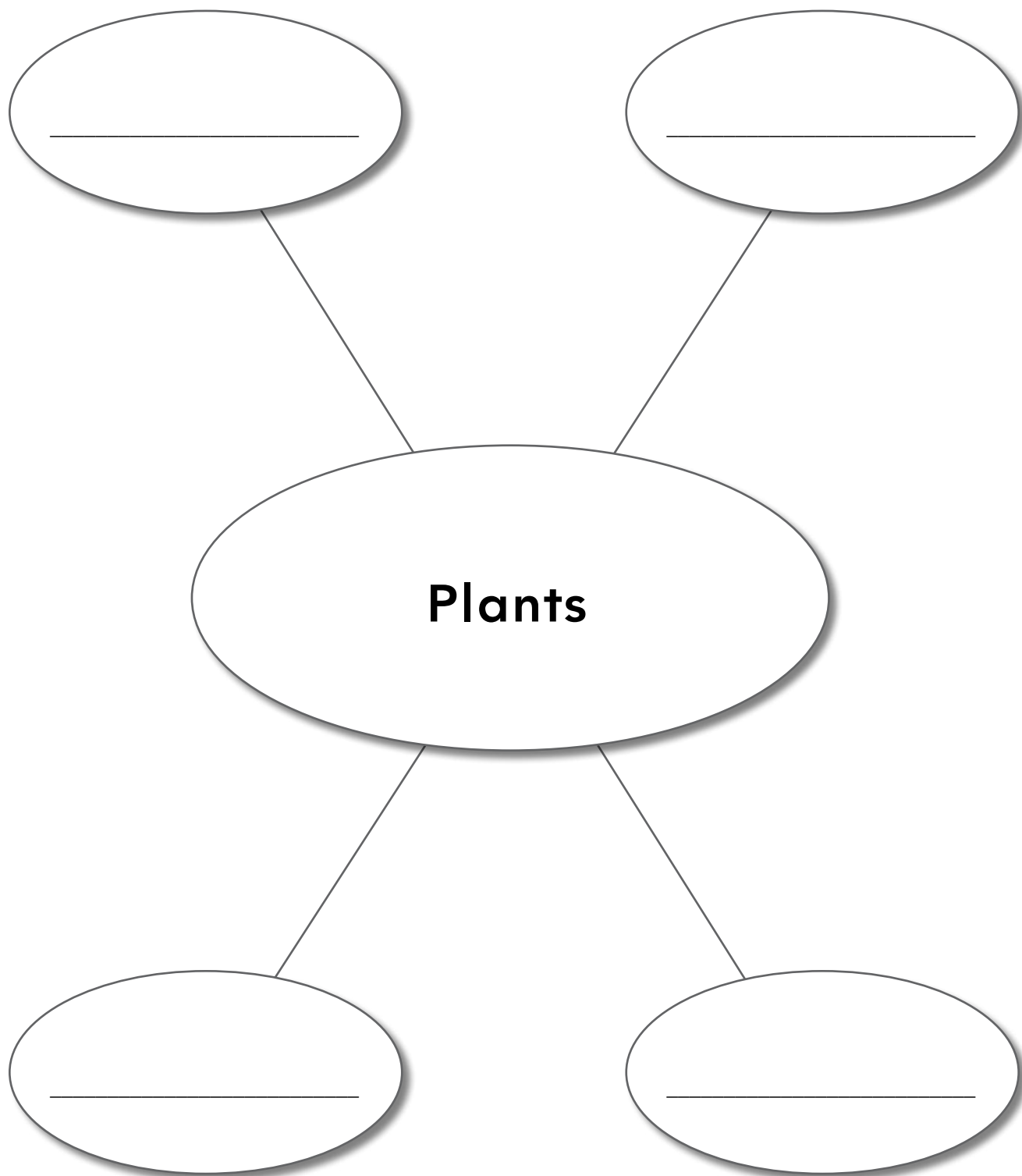


Checkpoint

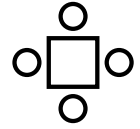
Name: _____

Plants Word Web

Directions: In the outside ovals, draw or write about what plants need to live. If needed, add more ovals.



Going Crazy Over Genres



3–5 Lesson

Standard

Knows the defining characteristics and structural elements of a variety of literary genres

Lesson Overview

This lesson allows students to use the *Kinesthetic Word Web* strategy while incorporating movement as they connect book titles to literary genres.

Materials

- index cards
- books of varying genres
- *Genres Word Web* (page 67)

Procedures

1. Prior to the lesson, create sets of index cards with the following words: *genres*, *mystery*, *fiction*, *nonfiction*, *fantasy*, *biography*, *poetry*, and *autobiography*. There should be enough sets so that each student receives a card.

Model

2. Divide students into groups of four. Select a student from each group to receive the books for his or her group, making sure each stack has a variety of genres. Instruct students to read the title and summary of each book and discuss what genre the book belongs to, creating stacks for each type.
3. Have student volunteers share a couple of books they chose for each category. Then review the different types of genres and clarify any misconceptions.

Apply/Analyze

4. Distribute one of the prepared index cards to each student.
5. Instruct students to walk around the room looking for words related to the words they have and to the main topic. For example, if Student A has *biography* and he or she finds Student B with *poetry*, they walk together and continue to find more related index cards. Do not tell them that *genres* is the main topic; let them deduce that themselves.
6. Once a group of students believes they have found all components, with no duplicates, instruct students to form an outer circle. The student holding the main topic, *genres*, stands in the middle. The outer circle of students each places one hand on the shoulder of the student with the word *genres*, creating a Kinesthetic Word Web.
7. Discuss with students how they were able to deduce that *genres* was the main topic of the lesson.

Going Crazy Over Genres (cont.)

Procedures (cont.)

Evaluate

8. Repeat steps 4–7, but this time, remove some of the main idea and detail index cards and replace them with Wild Cards (blank index cards).
9. Ask students to find which group they belong to. Those with Wild Cards can join any group by writing details on their cards that place them with an appropriate web. Students with Wild Cards must be able to justify their answers.
10. Debrief with students by discussing questions such as the following:
 - How did you decide which group to join or not join?
 - Was it easier or harder with some of the cards blank? Why or why not?



Checkpoint

Create

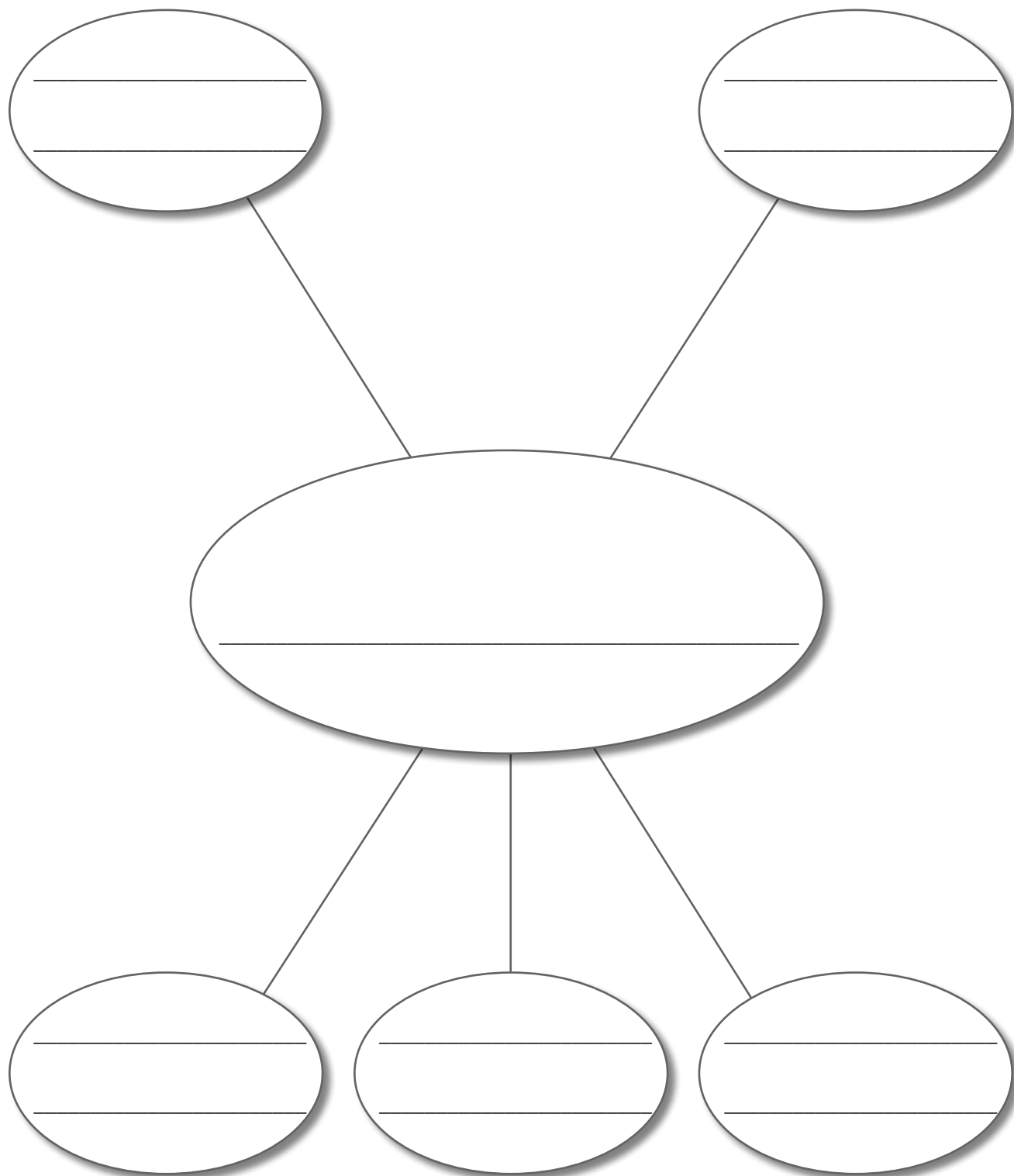
11. In groups of three, have students brainstorm a list of book titles that would go under each type of genre—mystery, fantasy, fiction, nonfiction, biography, autobiography, and poetry.
12. Distribute copies of the activity sheet *Genres Word Web* (page 67) to students as well as index cards. Assign each group one genre. Working together, have students complete the activity sheet. Students should write their types of genres in the middle ovals and the book titles in the outer ovals. If needed, they can add more ovals to the web. After each group has completed its set of index cards, collect all of them and randomly redistribute them, providing one card to each student.
13. Have each student walk around the room looking for words related to the word that he or she has. Once a group of students believe they have found everyone, with no duplicates, they form an outer circle and have the main-topic person stand in the middle. Students in the outer circle each place one hand on the shoulder of the student with the main topic, creating the Kinesthetic Word Web.
14. Debrief with students by asking questions, such as the following:
 - How did you know you belonged to that group?
 - What other title could you add to the web? What other title could we add to each web?



Checkpoint

Genres Word Web

Directions: Write your assigned genre in the middle and related book titles in the outer ovals. If needed, add more ovals with book titles.



Properties of Mathematics



6–8 Lesson

Standard

Understands the properties of operations with rational numbers

Lesson Overview

This lesson allows students to use the *Kinesthetic Word Webs* strategy while incorporating movement as they explore the properties of operations.

Materials

- *Properties Cards* (pages 70–71)
- index cards
- *Properties Web* (page 72)
- butcher paper
- string

Procedures

1. Use the *Properties Cards* activity sheet (pages 70–71) to create sets of cards. There should be one card per student.

Model

2. Complete an example word web on the board with students, using a high-interest topic. Write the selected word in the center oval and have students orally contribute what they know to the web. Record a few of the answers on index cards as students share.
3. Select three to five students and provide each with an index card created in step 2. Have students model a Kinesthetic Word Web.
4. Divide the class into partners. Review the distributive, commutative, associative, identity, and inverse properties with students.

Apply/Analyze

5. Distribute a *Properties Card* to each student. Instruct students to match their cards with other students' cards.
6. Allow students time to walk around looking for words related to their words, definitions, or examples. For example, if Student A has *commutative* and he or she finds Student B with $a + b = b + a$, they walk together to find Student C who has *in addition or subtraction, numbers can be added or multiplied in any order*.
7. Once a group of students have found all components, with no duplicates, instruct them to form an outer circle around the student holding the property word. Then have the outer circle of students demonstrate a Kinesthetic Word Web with the help of their cards.
8. Debrief with students about the activity and ask them how they knew they had found all of their webs' components.

Properties of Mathematics (cont.)

Procedures (cont.)

Evaluate

9. Repeat steps 5–7, but this time remove some of the cards and replace them with Wild Cards (blank index cards).
10. Ask students to find to which group they belong. Those with Wild Cards can join any group by writing an example, definition, or nonexample on their cards that places them with an appropriate web. Students with Wild Cards must be able to justify their answers. Those with nonexamples may choose to stand near the group for which they are a nonexample, or across the room to represent that they do not belong to any one web. Have students share with the class how they decided where they belong and why. Debrief with students by discussing questions such as the following:
 - How did you decide which group to join or not join?
 - Was it easier or harder with some of the blank cards? Why or why not?



Checkpoint

Create

11. Organize students into groups of no more than four. Assign each group a mathematical property. Have students brainstorm a way to remember their property, using an illustration. Working together, have students complete the activity sheet *Properties Web* (page 72).
12. When students have completed their webs, provide them with enough index cards for each of the ovals they completed. Have them record each oval's content on an index card. After each group has their set of index cards ready to go, collect all of them and randomly redistribute the cards, one to each student. Instruct students to walk around the room with their cards to figure out which index cards are related to theirs. Once a group believes they have found all of the components with no duplicates, instruct them to create a Kinesthetic Word Web.
13. Debrief with students by asking questions, such as the following:
 - How did you know you belonged to that group?
 - What else can you add to the web?

Allow students to glue their web of cards onto butcher paper and use string to connect their cards. Display the webs and encourage students to add to them throughout the topic of study.



Checkpoint

Properties Cards

Directions: Copy the cards so there is one card per student.

commutative	in addition or multiplication, numbers can be added or multiplied in any order
distributive	to multiply a number by each of the terms inside the parentheses
identity	when you add or multiply any number and the number keeps its value
inverse	to combine a number with its reciprocal and get its identity
associative	the sum or product is the same no matter how the numbers are grouped

Properties Cards *(cont.)*

$$a + b = b + a$$

$$a\left(\frac{1}{a}\right) = 1$$

$$a(b \cdot c) = (a \cdot b)c$$

$$a(b - c) = a(b) - a(c)$$

$$a + 0 = a$$

Name: _____

Properties Web

Directions: Write your group's assigned property in the middle oval and write a definition, examples, and an illustration in the outer ovals. If needed, add additional ovals with related examples.

