

Lesson Title: Constructing Mental Maps

Length: Two 45-minute sessions

Age Group: Grade 4

Materials Needed: Attached “Mental Mapping Worksheet 1”, colored tape, construction paper, crayons, and an enlarged version of the map on the “Mental Mapping Worksheet 1”.

Standards – Geography:

- *STANDARD 1 (4-5):* Students will demonstrate development of mental maps of Delaware and of the United States which include the relative location and characteristics of major physical features, political divisions, and human settlements.

Standards – Arts (Dance):

- *STANDARD 1:* Identifying and demonstrating movement elements and skills in performing arts.
- *STANDARD 2:* Understanding choreographic principles, processes, and structures.

Learning Objectives:

Cognitive:	Affective:	Artistic:
<ul style="list-style-type: none">• Students will be able to visualize, describe, and roughly sketch the outline of the map of Delaware including county lines.• Students will be able to explore and explain body shapes and movements which will aid students in recalling the shape and counties of Delaware.	<ul style="list-style-type: none">• Students will be able to work in pairs, small groups, and collectively as a class to create shapes and movements which aid in comprehending and representing the shape of Delaware.	<ul style="list-style-type: none">• Students will be able to physically map and create the shape and surrounding areas of Delaware with creative body movements and shapes.

Assessment Criteria for this lesson:

<ul style="list-style-type: none">• Students will show improvement in their sketch of the outline of Delaware including county lines.• Students will be able to show the instructor which shapes help them remember the outline of Delaware.	<ul style="list-style-type: none">• Students will work cooperatively in their pair, group, and with the class without disrupting other students in the classroom. They will follow directions and listen attentively to the instructor and classmates.	<ul style="list-style-type: none">• Students will be assessed according to the rubric for their final performance as a group based upon the following criteria: movements/shapes, force, pathways, levels, and map use.
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Introduce the Lesson's Target Learning:

How will you introduce your lesson's concept?

- Instructor must first show and/or provide an outline of the state of Delaware with the county lines clearly presented. The "Mental Mapping Worksheet 1" will be handed out at the start of the lesson. The worksheet should be completed as a class. Students should volunteer or be called on to read the questions aloud. Students will then answer the questions in a discussion-type atmosphere, filling in the answers as they follow along. The instructor shall guide the activity, ensuring that all students understand the concepts on the worksheet.

Why are you studying this?

- This lesson is important in understanding the shape of the state they live in (Delaware) along with the importance of the location, boundaries, and names of the three counties. This mental mapping lesson also introduces the "actual/physical" mapping lessons which will follow.

Integrated Activities:

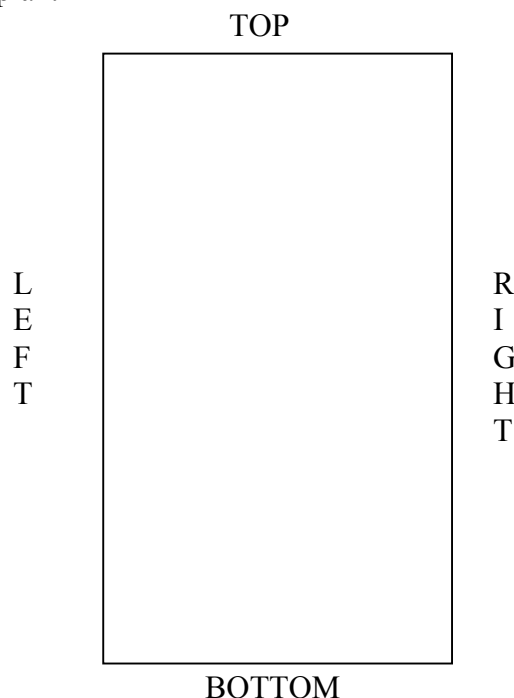
Outline the steps/instructions that will take place for this activity from beginning to end:

1. Tape enlarged version of the map from "Mental Mapping Worksheet 1" to the board so that all students are in view.
2. Hand out "Mental Mapping Worksheet 1" to all students in the classroom.
3. Complete worksheet in a discussion-based atmosphere, calling upon students to read AND answer the questions. As you move from question to question, have different students come up to the board and point to the appropriate places on the map which correspond with the question, showing the entire class where they found their answer.
4. Once the entire worksheet is completed, students should all stand up and move into an open area; each student should be aware of their "self-space".
5. As a class, make the shapes and try the movements which the students came up with on the worksheet that represent the state of Delaware. For example, have students make themselves into an "L" shape low to the ground to represent that the bottom of Delaware is an "L". Next, they would make a "hook" shape high above their heads to represent that the top of Delaware looks like a hook, etc. The movements and shapes will vary according to the students' interpretation of the material.
6. Next, the instructor should pair students up into partners. Move the partners into different areas of the room, providing each set of partners with two large sheets of white construction paper and two crayons.
7. Sitting with their partner, each student will take their turn tracing the shape of Delaware in the air in front of them, showing their partner the outline of

Delaware. Once both partners have traced the shape of Delaware in the air in front of themselves and their partner, each partner will draw the best outline of Delaware they can—each partner will draw on their own construction paper, labeling their drawing with their name and the title “SIDE ONE”. Put the drawings off to the side; students will be working with these again following the close of the lesson.

8. Divide the class into equal groups. Have the outline of a rectangle taped very large on the floor of an open area with colored tape. Label each side according to direction – Top, Bottom, Right, and Left – this will be the basic directions which students will follow to create their “movement map”.

Sample floor plan:



9. As a group, all members will choreograph a movement/shape dance which will correspond to the map of Delaware. They will perform within the outlined rectangle, and also they should construct their “movement map” according to the directions labeled on the floor. Students should be given 8-10 minutes to work on this. Each group may interpret this assignment however they wish. All group members should assign specific shapes/movements that they perform together. They should correspond with the map, as well. For example, when the group reaches the top of the rectangle, they may do a hook shape, and then as they move down the right side, they move in a wavy or zigzag pattern for the jagged coastline. Tell groups they must somehow acknowledge the entire outline of DE in their performance, use levels, pathways, and force. Also tell students to use their worksheets as a guideline while choreographing in their groups. They will not be permitted to use the worksheet or any reference during their performance.

Exploration Activities:**Vocabulary of Dance--Space, Time, Force, Body Movement****Target Activities:****Specific Curricular Content Included:****Culminating Activity:**

Please see #9 above

Assessment:**Reflection questions, Movement Concept Chart, Check list?**

1. The first assessment of the understanding of the lesson is the collection of the “Mental Mapping Worksheet 1” (which should have been filled out by students individually while they followed along with the class – this should be an easy check plus if the student is paying attention during class):

RUBRIC FOR WORKSHEET

-Student completed entire worksheet	√+
-Student partially completed worksheet	√
-Student did not complete worksheet	√-

2. The second assessment of the understanding of the lesson is the improvement of the student’s drawing:

RUBRIC FOR DRAWING (out of 5 possible points)

<ul style="list-style-type: none"> • Student showed significant improvement from Drawing 1 to Drawing 2, OR • Student drew two equally accurate pictures 	5/5
<ul style="list-style-type: none"> • Student showed some improvement from Drawing 1 to Drawing 2, OR • Student drew two equally somewhat accurate pictures 	4/5
<ul style="list-style-type: none"> • Student showed little improvement from Drawing 1 to Drawing 2, OR • Student drew two equal pictures with little accuracy 	3/5
<ul style="list-style-type: none"> • Student showed no improvement from Drawing 1 to Drawing 2, OR • Student drew two equal pictures with no accuracy 	2/5
<ul style="list-style-type: none"> • Student did not participate in the activity 	0/5

3. The third assessment of the understanding of the lesson is the final performance rubric:
RUBRIC FOR FINAL PERFORMANCE (out of 50 possible points)
 (Students shall receive copy of rubric before performance)

<ul style="list-style-type: none"> MOVEMENTS/SHAPES 	<ul style="list-style-type: none"> Group did a variety of movements/shapes which accurately corresponded with the map Group did a variety of movements/shapes which somewhat corresponded with the map Group did little movements/shapes which somewhat corresponded to the map Group did little movements/shapes which did not correspond to the map 	<p>9-10 points</p> <p>7-8 points</p> <p>5-6 points</p> <p>0-4 points</p>	<p>_____/10</p>
<ul style="list-style-type: none"> FORCE 	<ul style="list-style-type: none"> Students utilized different forms of force when necessary which corresponded with the map Students utilized different forms of force when necessary which somewhat corresponded with the map Students utilized different forms of force when necessary which did not necessarily correspond with the map Students utilized one type of force Students did not utilize force in the performance 	<p>9-10 points</p> <p>7-8 points</p> <p>5-6 points</p> <p>4 points</p> <p>0-3 points</p>	<p>_____/10</p>
<ul style="list-style-type: none"> PATHWAYS 	<ul style="list-style-type: none"> Students utilized different pathways when necessary which corresponded with the map Students utilized different pathways when necessary which somewhat corresponded with the map Students utilized different pathways when necessary which did not necessarily correspond with the map Students utilized one type of pathway Students did not utilize pathways in the performance 	<p>9-10 points</p> <p>7-8 points</p> <p>5-6 points</p> <p>4 points</p> <p>0-3 points</p>	<p>_____/10</p>
<ul style="list-style-type: none"> LEVELS 	<ul style="list-style-type: none"> Students utilized different levels when necessary which corresponded with the map Students utilized different levels when necessary which somewhat corresponded with the map 	<p>9-10 points</p> <p>7-8 points</p>	

	<ul style="list-style-type: none"> Students utilized different levels when necessary which did not necessarily correspond with the map Students utilized one level in their performance Students did not utilize levels in the performance 	5-6 points 4 points 0-3 points	 _____ /10
<ul style="list-style-type: none"> MAP USE 	<ul style="list-style-type: none"> Students made the entire shape of DE Students did not make the entire shape of DE 	10 points 5 points	 _____ /10
		TOTAL:	_____ /50

Name _____

Date _____

Mental Mapping Worksheet 1



1. Point to Delaware on the map. How many “sections” is Delaware divided into?

What are these “sections” called?

2. Now trace the outline of Delaware with your pointer finger. Repeat this five times, very slowly. Count quietly to yourself each time you trace the entire state. Run you finger across the county lines three times.
3. What shape or letter can you think of that will help you remember what the bottom of Delaware looks like?

Movements for the BOTTOM of Delaware:

Force	
Level	
Pathway	

4. What shape can you think of that will help you remember what the top of Delaware looks like?

Movements for the TOP of Delaware:

Force	
Level	
Pathway	

Mental Mapping Worksheet 1 – *Continued*

Movements for the LEFT SIDE of Delaware:

Force	
Level	
Pathway	

Movements for the RIGHT SIDE of Delaware:

Force	
Level	
Pathway	

Name ANSWER KEY GUIDELINE

Date _____

Mental Mapping Worksheet 1



1. Point to Delaware on the map. How many “sections” is Delaware divided into?

Three

What are these “sections” called?

Counties

2. Now trace the outline of Delaware with your pointer finger. Repeat this five times, very slowly. Count quietly to yourself each time you trace the entire state. Run you finger across the county lines three times.

3. What shape or letter can you think of that will help you remember what the bottom of Delaware looks like?

An “L” Shape

Movements for the BOTTOM of Delaware:

Force	Sharp
Level	Low
Pathway	Straight

4. What shape can you think of that will help you remember what the top of Delaware looks like?

A “Hook” shape

Movements for the TOP of Delaware:

Force	Smooth
Level	High
Pathway	Curved

Mental Mapping Worksheet 1 – *Continued*

Movements for the LEFT SIDE of Delaware:

Force	Sharp
Level	High to Low
Pathway	Straight

Movements for the RIGHT SIDE of Delaware:

Force	Sharp and Smooth
Level	High to Low
Pathway	Curved / Zigzag