Lesson 3
Mapping Idaho State Parks

Theme: “Get on the Grid.”

Content Objectives:
Students will:
- Draw Idaho on grid paper using coordinates
- Locate state parks on grid paper using coordinates
- Learn how to use a legend on a map
- Locate state parks on Idaho Official Highway Map and/or Idaho State Parks and Recreation Guide using coordinates
- Find coordinates for chosen parks on an official map or guide based on recreation interests

Suggested Level:
Fourth (4th) Grade

Standards Correlation:
- Language Arts
  - Standard 1: Reading Process 1.2, 1.8
  - Standard 2: Comprehension/Interpretation 2.2
- Mathematics
  - Standard 1: Number and Operation 1.1
  - Standard 2: Concepts and Principles of Measurement 2.1
  - Standard 4: Concepts and Principles of Geometry 4.1, 4.3
- Health
  - Standard 4: Consumer Health 4.1
  - Standard 5: Mental and Emotional Wellness 5.1
- Physical Education
  - Standard 3: Physically Active Lifestyle 3.1
- Science
  - Standard 1: Nature of Science 1.8
- Social Studies
  - Standard 2: Geography 2.1
  - Standard 3: Economics 3.1

Suggested Time Allowance:
Two 1-hour sessions

Materials:
- “Coordinate Key” Sheet
- “Grid Paper” Sheet
- Writing instruments
- Pocket folders (portfolios)
- Idaho State Parks and Recreation Guide (One for each student, if possible)
- Idaho Official Highway Maps (One for each student, if possible)

Preparation:
- Copy “Coordinate Key” Sheet (one for each student)
- Copy “Grid Paper” Sheet (one for each student)
- Pocket folders (each student's portfolio)
- Order Idaho State Parks and Recreation Guides (Free from IDPR)
- Order Idaho Official Highway Maps (Free from Idaho Tourism)

Procedures:
Session 1:
1. Hand out copies of the “Coordinate Key” Sheet and copies of the “Grid Paper” Sheet.
2. Have the students highlight vocabulary involved with grids (origin, domain, range, perimeter) and the definitions.
3. Explain this section of a grid is Quadrant 1 and only contains positive numbers.
4. Give an example of a coordinate and explain that the first number given in a coordinate goes across to the right for positive numbers (to the left for negative numbers) and the second number goes up for positive numbers (down for negative numbers).
5. Let students find coordinates on “Coordinate Key” connecting the coordinates as they go to find the shape of the perimeter (outline).
6. Have the students mark the points for the various State Parks (with stars, if desired).
7. Locate your school on a map and mark it on the grid. Write the coordinates for your school.
8. Locate the State Parks closest to the school.

Session 2:
1. Give each student a copy of the Idaho Official Highway Map and/or the Idaho State Parks and Recreation Guide (note: the guide has a written description of each park along with recreational opportunities at each park).
2. Talk about the legends on each map and how to use them.
3. Discuss the grid markings on the map and or guide. Point out that road maps use numbers and letters and maps place the horizontal letter before a vertical number, so a coordinate would be written (K,6).
4. Have students locate and write the coordinates for the school and up to 5 different State Parks they would like to visit.
5. Allow the students to share the coordinates with the class, one at a time, while other students try to find which State Park the coordinates are indicating. Then have the student tell why they would visit that State Park.

Assessment Strategies:
- Class participation
- Grid map of Idaho with State Parks marked
- Coordinates for State Parks
- Presentation to class

Extension Activities:
- Refer to Idaho State Park 100th Anniversary Activity Book for additional activities.
- Using a compass on a large open outdoor area or in the gym, compile a set of coordinates and measurements (metric or traditional) to create the perimeter of Idaho using tape and string.

Resources:
- Idaho Official Highway Maps FREE Idaho Tourism (208)334-2470
- Idaho State Parks and Recreation Guide FREE Idaho Department of Parks and Recreation Regional Service Center contact information: PO Box 83720 • Boise, ID 83720-0065 • (208) 334-4199 or online at www.parksandrecreation.idaho.gov
- Idaho Department of Parks and Recreation Homepage www.parksandrecreation.idaho.gov

Headquarters in your area:

North Idaho Field Bureau Chief
Idaho Dept. Parks & Recreation
2885 Kathleen Avenue, Suite 1
Coeur d’Alene ID 83815
208-769-1511
Fax: 208-769-1418

South Idaho Field Bureau Chief
Idaho Dept. Parks & Recreation
5657 Warm Springs Avenue
P.O. Box 83720
Boise ID 83720-0065
208-514-2400
FAX 208-334-3741

East Idaho Field Bureau Chief
Idaho Dept. of Parks & Recreation
4279 Commerce Circle, Suite B
Idaho Falls ID 83401
208-525-7121
FAX 208-525-7123
Coordinate Key

Always start at the origin (0,0). Plot the ordered pair (a point on a coordinate graph) by counting the number of units across (x-coordinate or domain) then the number of units up (y-coordinate or range). (Hint: You may want to write the numbers yourself by each line to help you count the units)

**Perimeter (outline)**
Connect the points as you plot them. You may want to letter the points to help you keep track of where you are. What shape does the perimeter (outline) of this series of coordinates make?

<table>
<thead>
<tr>
<th>Letter</th>
<th>Coordinates</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
<td>B</td>
<td>(4,10)</td>
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<tr>
<td>C</td>
<td>(5,11)</td>
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<tr>
<td>D</td>
<td>(4,12)</td>
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<td>E</td>
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<td>F</td>
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<td>I</td>
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<td>J</td>
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<td>K</td>
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<td>Y</td>
<td>(21,1)</td>
</tr>
<tr>
<td>Z</td>
<td>(4,1)</td>
</tr>
</tbody>
</table>

**State Parks**
Plot the points to the State Parks in Idaho. Put a star at each park point.

(6,31) Priest Lake
(6,29) Round Lake
(6,28) Farragut
(5,27) Coeur d'Alene
(7,27) Old Mission
(6,26) Heyburn
(6,25) McCroskey
(7,22) Dworshak
(5,21) Hells Gate
(6,20) Winchester
(7,14) Ponderosa
(7,13) Cascade
(11,2) Land of the Yankee Fork
(19,12) Harriman
(20,13) Henrys Lake
(6,9) Eagle Island
(7,8) Lucky Peak
(7,5) Bruneau Dunes
(8,6) Three Island Crossing
(10,4) Malad Gorge
(11,5) Niagara Springs
(13,5) Lake Walcott
(15,4) Massacre Rocks
(13,2) City of Rocks (National Reserve)
(20,12) Bear Lake
**Grid Paper**

**Reminders:**
- (0,0) is the origin or starting point.
- The first number is the domain (x-coordinate) and goes across to the right (since these are all positive numbers in Quadrant 1).
- The second number is the range (y-coordinate) and goes up (since these are all positive numbers in Quadrant 1).

**Hint:** You may want to number along the bottom and up the left hand side to help you while you count.

School coordinates: (____,____).

Parks closest to my school (at least 3):

________________________________________

________________________________________

________________________________________