INTERNATIONAL
TENNIS HALL OF FAME

North American Geography

Lesson 5: Barnstorm Like a Tennis Player!

Unit Overview: As students work through the activities in this unit they will be introduced to the United States in general, different regions of the United States, map symbols, Hall of Famer Jack Kramer, and his Barnstorming Tour of the 1950s. They will explore, through varied learning experiences, the significance of Kramer's tour to the game of tennis while learning about different parts of the country. The activities that accompany this unit are geared towards the students' multiple intelligences and will provide academic challenges at multiple levels of cognitive complexity while satisfying the goal of working towards mastery of grade appropriate common core standards of Literacy, Geography, and Mathematics.

Objectives:
Students will be able to-

- Gain background knowledge through vocabulary activities and comprehension activities (such as guided questioning and using appropriate graphic organizers) the geography of the United States and its regions, along with what it was like in the 1950s.
- Form an understanding of the contribution that Jack Kramer made to the sport of tennis.
- Demonstrate what they have learned about the geography of the United States, map skills, Jack Kramer and his significance to the game of tennis, and his place in history by successfully completing guided questioning activities, group organizers, and by taking part in meaningful classroom discussions.

Common Core Standards:

CCSS.ELA – Literacy RI 4.3 - Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

CCSS.ELA – Literacy RI 4.7 - Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or

interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

CCSS.ELA – LiteracyW.4.2 - Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

CCSS.ELA – LiteracyW.4.7 -Conduct short research projects that build knowledge through investigation of different aspects of a topic.

CC.3.MD.1 – Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

CC.3.MD.5 – Geometric measurement: understand concepts of area and relate area to multiplication and to addition. Recognize area as an attribute of plane figures and understand concepts of area measurement.

CC.4.MD.4 – Represent and interpret data. Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

Rhode Island Department of Education Standards

G 1: The World in Spatial Terms: Understanding and interpreting the organization of people, places, and environments on Earth's surface provides an understanding of the world in spatial terms.

G 1 (3-4) – 1 Students understand maps, globes, and other geographic tools and technologies by:

-accurately using maps to identify locations.

-identifying relationships between time, space, and distance.

-organizing information about people, places, and environments in a spatial context (e.g., the school is to the east of the store; the house is northeast of the mountains).

G 1 (3-4) –2 Students identify the characteristics and features of maps by:

-applying map skills to represent a location (e.g., design a map).

-identifying and describing locations.

G 2: Places and Regions: Physical and human characteristics (e.g., culture, experiences, etc.) influence places and regions.

G 2 (3-4) – 1 Students understand the physical and human characteristics of places by:

-explaining ways in which geographical features determine how people live and work (e.g., living near the ocean gives opportunity to be fishermen or marine biologist).

- explaining how natural/physical features and human-made features makes a place unique.

G 2 (3-4) –2 Students distinguish between regions and places by:

- defining a region and its associated places (e.g., the region of New England includes the city of Providence; a city can have several neighborhoods).

- explaining the difference between regions and places (e.g., a desert region is dry, rainforest regions are wet; Providence is densely populated, Exeter is sparsely populated).

Grades 3 and 4 Mathematics: Measurements and Data

-Solve problems involving measurement and estimation of intervals of time, liquid, volumes, and masses of objects

-Geometric measurement: understand concepts of area and relate area to multiplication and addition

Lesson Time Suggested: Two or three class periods

Possible Sources:

- *The Complete Book of Maps and Geography: Grades 3-6* by American Education Publishing
- *National Geographic Kids United States Atlas* by National Geographic
- *The World Almanac and Book of Facts 2016* by Sarah Janssen

Materials Needed:

- Vocabulary Builder #5
- Map of Jack Kramer's Pro Tour from the International Tennis Hall of Fame (either in photo form or on a site visit)
- *National Geographic Kids United States Atlas* by National Geographic
- List of U.S. city populations in 1950

Vocabulary:

- barnstorm- travel around giving exhibitions (of sport, theatre, etc.)
- interstate- a highway serving two or more states
- almanac- an annual reference book of useful and interesting facts relating to countries of the world, sports, entertainment, etc.

Lesson & Activity

Teaching/Model

1. Vocabulary Builder: Each student will receive a Vocabulary Builder graphic organizer. The teacher will read each word and ask the students to fill in bubble 1 if they have never heard the word before, bubble 2 if they have heard the word but are unsure of the definition or bubble 3 if they know the word and can give the definition and use it in a sentence.
2. The teacher will work collaboratively with the students to come up with a working definition of the words on the graphic organizer and a sentence using the words as they pertain to the lesson at hand.
3. Using the map in the the Popular Game: Tennis and Tours at the International Tennis Hall of Fame show students how players used to barnstorm on the Jack Kramer Tour.
4. **Students who exceed or meet expectations:
    a. Students will be assigned a city on the Jack Kramer Tour to research using the atlas
    b. Students will find out what state the city is in, whether or not it is the capital, what major roads and geological features are around it (lakes,

mountains, parks), what other cities are nearby, and using the provided list, what the population was in 1950 (if available).

c. Students will look at the next stop on the Jack Kramer Tour and figure out what roads to take to get to the next stop, and write out directions to the next stop using directions (north, south, east, west, etc.)
d. Using the atlas, students will trace the state that the city is in, and add the city into the state
e. Students will then present their city to the class

5. **Students who partially meet or did not yet meet expectations:
    a. Students will be put in to groups of 2 or 3 and assigned a city on the Jack Kramer Tour to research using the atlas
    b. Students will find out what state the city is in, whether or not it is the capital, what major roads and geological features are around it (lakes, mountains, parks), what other cities are nearby, and using the provided list, what the population was in 1950 (if available).
    c. Students will look at the next stop on the Jack Kramer Tour and figure out what roads to take to get to the next stop, and write out directions to the next stop using directions (north, south, east, west, etc.)
    d. Using the atlas, students will trace the state that the city is in, and add the city into the state
    e. Students will then present their city to the class

Popular Game: Tennis and Tours

Jack Kramer Tennis Tour map

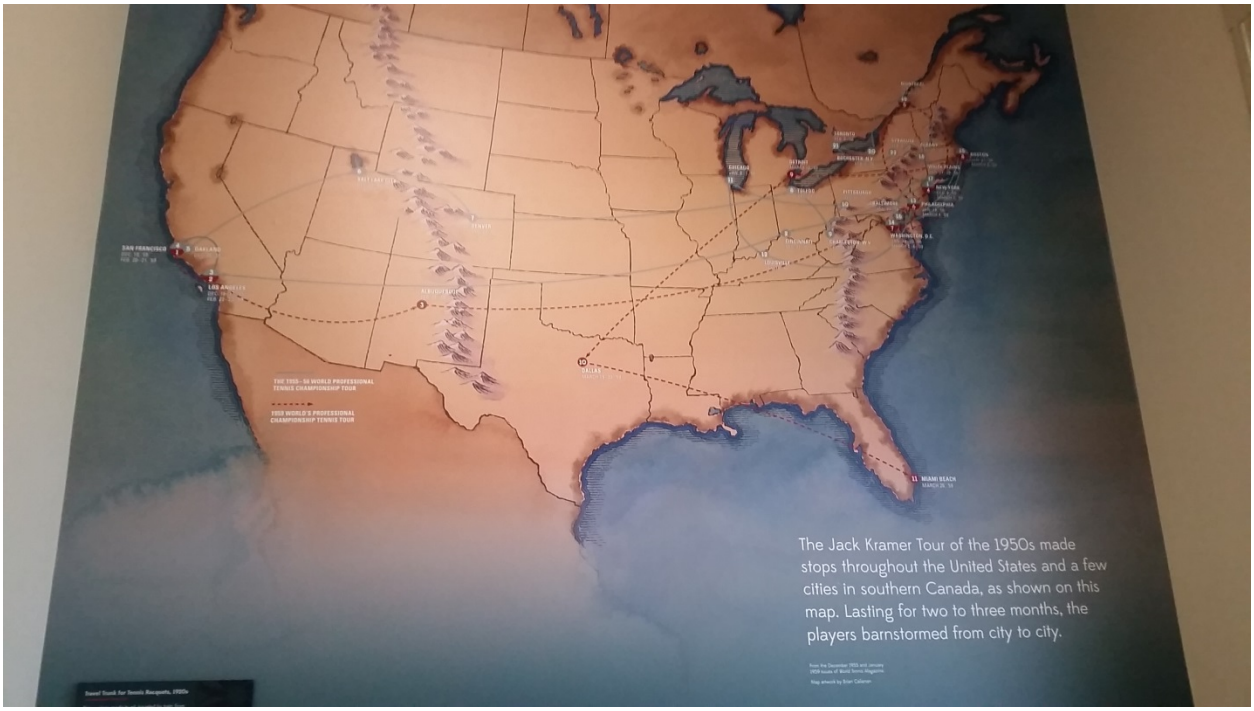

Table 18. Population of the 100 Largest Urban Places: 1950

Source: U.S. Bureau of the Census
Internet Release date: June 15, 1998

Rank	Place 1/	Population	Land area (sq. miles)	Density (average population per sq. mile)
1	New York city, NY *	7,891,957	315.1	25,046
2	Chicago city, IL	3,620,962	207.5	17,450
3	Philadelphia city, PA	2,071,605	127.2	16,286
4	Los Angeles city, CA	1,970,358	450.9	4,370
5	Detroit city, MI	1,849,568	139.6	13,249
6	Baltimore city, MD	949,708	78.7	12,067
7	Cleveland city, OH	914,808	75.0	12,197
8	St. Louis city, MO	856,796	61.0	14,046
9	Washington city, DC	802,178	61.4	13,065
10	Boston city, MA	801,444	47.8	16,767
11	San Francisco city, CA	775,357	44.6	17,385
12	Pittsburgh city, PA	676,806	54.2	12,487
13	Milwaukee city, WI	637,392	50.0	12,748
14	Houston city, TX	596,163	160.0	3,726
15	Buffalo city, NY	580,132	39.4	14,724
16	New Orleans city, LA	570,445	199.4	2,861
17	Minneapolis city, MN	521,718	53.8	9,697
18	Cincinnati city, OH	503,998	75.1	6,711
19	Seattle city, WA	467,591	70.8	6,604
20	Kansas City city, MO	456,622	80.6	5,665
21	Newark city, NJ	438,776	23.6	18,592
22	Dallas city, TX	434,462	112.0	3,879
23	Indianapolis city, IN	427,173	55.2	7,739
24	Denver city, CO	415,786	66.8	6,224
25	San Antonio city, TX	408,442	69.5	5,877
26	Memphis city, TN	396,000	104.2	3,800
27	Oakland city, CA	384,575	53.0	7,256
28	Columbus city, OH	375,901	39.4	9,541
29	Portland city, OR	373,628	64.1	5,829
30	Louisville city, KY	369,129	39.9	9,251
31	San Diego city, CA	334,387	99.4	3,364
32	Rochester city, NY	332,488	36.0	9,236
33	Atlanta city, GA	331,314	36.9	8,979
34	Birmingham city, AL	326,037	65.3	4,993
35	St. Paul city, MN	311,349	52.2	5,965
36	Toledo city, OH	303,616	38.3	7,927
37	Jersey City city, NJ	299,017	13.0	23,001
38	Fort Worth city, TX	278,778	93.7	2,975
39	Akron city, OH	274,605	53.7	5,114
40	Omaha city, NE	251,117	40.7	6,170
41	Long Beach city, CA	250,767	34.7	7,227
42	Miami city, FL	249,276	34.2	7,289
43	Providence city, RI	248,674	17.9	13,892
44	Dayton city, OH	243,872	25.0	9,755
45	Oklahoma City city, OK	243,504	50.8	4,793

46	Richmond city, VA.....	230,310	37.1	6,208
47	Syracuse city, NY.....	220,583	25.3	8,719
48	Norfolk city, VA.....	213,513	28.2	7,571
49	Jacksonville city, FL....	204,517	30.2	6,772
50	Worcester city, MA.....	203,486	37.0	5,500
51	Tulsa city, OK.....	182,740	26.7	6,844
52	Salt Lake City city, UT..	182,121	53.9	3,379
53	Des Moines city, IA.....	177,965	54.9	3,242
54	Hartford city, CT.....	177,397	17.4	10,195
55	Grand Rapids city, MI....	176,515	23.4	7,543
56	Nashville city, TN.....	174,307	22.0	7,923
57	Youngstown city, OH.....	168,330	32.8	5,132
58	Wichita city, KS.....	168,279	25.7	6,548
59	New Haven city, CT.....	164,443	17.9	9,187
60	Flint city, MI.....	163,143	29.3	5,568
61	Springfield city, MA.....	162,399	31.7	5,123
62	Spokane city WA.....	161,721	41.5	3,897
63	Bridgeport city, CT.....	158,709	14.6	10,870
64	Yonkers city, NY.....	152,798	17.2	8,884
65	Tacoma city WA.....	143,673	47.9	2,999
66	Paterson city, NJ.....	139,336	8.1	17,202
67	Sacramento city, CA.....	137,572	16.9	8,140
68	Arlington CDP, VA *.....	135,449	24.0	5,644
69	Albany city, NY.....	134,995	19.0	7,105
70	Charlotte city, NC.....	134,042	30.0	4,468
71	Gary city, IN.....	133,911	41.6	3,219
72	Fort Wayne city, IN.....	133,607	18.8	7,107
73	Austin city, TX.....	132,459	32.1	4,126
74	Chattanooga city, TN.....	131,041	28.0	4,680
75	Erie city, PA.....	130,803	18.8	6,958
76	El Paso city, TX.....	130,485	25.6	5,097
77	Kansas City city, KS.....	129,553	18.7	6,928
78	Mobile city, AL.....	129,009	25.4	5,079
79	Evansville city, IN.....	128,636	18.0	7,146
80	Trenton city, NJ.....	128,009	7.2	17,779
81	Shreveport city, LA.....	127,206	24.0	5,300
82	Baton Rouge city, LA.....	125,629	30.2	4,160
83	Scranton city, PA.....	125,536	24.9	5,042
84	Knoxville city, TN.....	124,769	25.4	4,912
85	Tampa city, FL.....	124,681	19.0	6,562
86	Camden city, NJ.....	124,555	8.6	14,483
87	Cambridge city, MA.....	120,740	6.2	19,474
88	Savannah city, GA.....	119,638	14.6	8,194
89	Canton city, OH.....	116,912	14.1	8,292
90	South Bend city, IN.....	115,911	20.2	5,738