

Location Activity Teacher's Guide

Place lakes on a grid using latitude and longitude to find absolute and relative locations.

GRADE LEVEL: 6th – 8th

SUBJECT AREA/COURSE: Geography/History

SUNSHINE STATE STANDARDS:

- The student knows the role of physical and cultural geography in shaping events. (SS.A.4.3.2)
- The student knows the unique geographic and demographic characteristics that define Florida as a region. (SS.A.6.3.2)
- The student understands how Florida has allocated and used resources and the consequences of those economic decisions. (SS.A.6.3.5)

ACADEMIC OUTCOMES/LESSON OBJECTIVES:

- Students will locate and record the latitude and longitude of various lakes in Seminole County.
- Students will locate the lakes on a latitude/longitude grid of Seminole County.

BACKGROUND INFORMATION: When teaching latitude and longitude, students seldom have the opportunity to work with familiar places in their own community. The opportunity to find precise locations beyond degrees is also limited. Instead, students will find and associate an approximate degree of latitude and longitude to a major city on the globe. This provides a necessary foundation to the refinement of this skill by identifying local locations (lakes) in terms of degrees, minutes and seconds in this lesson.

DURATION: 1-2 instructional periods

MATERIALS NEEDED: Internet access, handout worksheet (provided)

SAFETY: N/A

VOCABULARY: latitude, longitude, degree, minute, second

KEY:

	<i>Degrees</i>	<i>Minutes</i>	<i>Seconds</i>		<i>Degrees</i>	<i>Minutes</i>	<i>Seconds</i>	
<i>Little Bear Lake</i>	28	38	41	<i>Lake Harney</i>	28	45	17	latitude
	-81	26	41		-81	3	18	longitude
<i>Yankee Lake</i>	28	48	59	<i>Lake Nixon</i>	28	39	23	latitude
	-81	23	22		-81	8	21	longitude
<i>Puzzle Lake</i>	28	40	30	<i>Lake Eva</i>	28	38	46	latitude
	-81	00	58		-81	8	42	longitude
<i>Trout Lake (Casselberry)</i>	28	40	42	<i>Red Bug Lake</i>	28	39	4	latitude
	-81	20	42		-81	17	27	longitude
<i>Lake Jesup</i>	28	46	8	<i>Lake Geoffrey</i>	28	43	42	latitude
	-81	17	5		-81	20	11	longitude

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Seminole County Watershed Atlas Curriculum for Teachers

Location Game Quiz *Teacher's Guide*

Place lakes on a grid using latitude and longitude to find absolute and relative locations.

Use the following quiz in a Game Show Format, enter it in an online quiz program, or print it out. The answers are with the questions.

ABSOLUTE LOCATION AND RELATIVE LOCATION

Before beginning this quiz, students will need to complete the activity worksheet using the information on www.Seminole.WaterAtlas.org.

Use your completed Location Activity to answer the quiz.

There will be a total of 15 questions to test your understanding of relative location and absolute location using latitude and longitude. Questions 13-15 are true statements about the data. Students are to identify whether these statements refer to relative location or absolute location.

1. Which lake is located at 28 degrees 45 minutes 17 seconds N Latitude?
Little Bear Lake, Lake Harney, Red Bug Lake (2)
2. Which lake is located farthest north?
Yankee Lake, Lake Nixon, Red Bug Lake (1)
3. Which lake is located farthest east?
Puzzle Lake, Little Bear Lake, Trout Lake (1)
4. What is the latitude of Lake Geoffrey?
28 degrees, 45 minutes, 17 seconds N
28 degrees, 43 minutes, 42 seconds N
28 degrees, 40 minutes, 42 seconds N (2)
5. Which two lakes are closest to each other?
Lake Jesup and Puzzle Lake, Red Bug Lake and Lake Nixon, Lake Nixon and Lake Eva (3)
6. What lake is located 3 degrees north of Trout Lake?
Lake Geoffrey, Red Bug Lake, Lake Jesup (1)
7. Which lake is located 3 degrees east of Trout Lake?
Lake Geoffrey, Red Bug Lake, Lake Jesup (2)
8. Which lake is located farthest from Lake Harney?
Yankee Lake, Little Bear Lake, Lake Eva, (2)
9. Which lake is located farthest west?
Little Bear Lake, Yankee Lake, Trout Lake (1)
10. When searching for your lake data, which aerial photograph showed a river entering the south east corner of the lake?
Lake Nixon, Lake Harney, Trout Lake (2)
11. Which lake is located farthest south?
Little Bear Lake, Lake Harney, Red Bug Lake (1)



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12. Which lake is located farthest south?
Little Bear Lake, Lake Nixon, Red Bug Lake (1)
 13. All of the lakes in the survey are located in Seminole County, Florida.
Absolute Location, Relative Location (2)
 14. Trout Lake is located just south of Lake Geoffrey.
Absolute Location, Relative Location (2)
 15. Lake Jesup is located in the middle of Seminole County.
Absolute Location, Relative Location (2)
 16. What lake is located 3 degrees north of Trout Lake?
Lake Geoffrey, Red Bug Lake, Lake Jesup (1)
 17. Which lake is located 3 degrees east of Trout Lake?
Lake Geoffrey, Red Bug Lake, Lake Jesup (2)
 18. Which lake is located farthest from Lake Harney?
Yankee Lake, Little Bear Lake, Lake Eva (2)
 19. Which lake is located farthest west?
Little Bear Lake, Yankee Lake, Trout Lake (1)
 20. When searching for your lake data, which aerial photograph included a picture of Milwee Middle School?
Lake Nixon, Lake Harney, Trout Lake (3)
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