

Math Lesson Worksheets

The Newfoundland Watershed Master Plan



2.1 A Visit to the Newfound Lake Watershed



Name: _____

1. About how many people live in the Newfound Lake Watershed?

_____ between 100 – 200 _____ between 1,000 – 10,000
_____ between 500 – 1,000 _____ between 10,000 – 100,000

2. In 2005, about how many people drove on North Shore Road in Hebron per day?

_____ between 100 – 200 _____ between 1,000 – 2,000
_____ between 500 – 1,000 _____ between 10,000 – 100,000

3. Which town inside the watershed has the highest population in 2005?

4. About how many towns with a population the size of Hebron would it take to equal the town with the highest population in the watershed?

5. The average age within the watershed is _____.

6. About what percent of the people living in Grafton County have a high school degree or higher? _____

7. The population of the watershed in the future will likely

_____ go up
_____ go down
_____ remain the same

2.5 A Visit to the Newfound Lake Watershed



Name: _____

1. About how many times did you swim in Newfound Lake last summer?

_____ between 0-5
 _____ between 6-10

_____ between 11-15
 _____ more than 16

2. About how many times did you ride in a motor boat on Newfound Lake last summer?

_____ between 0-5
 _____ between 6-10

_____ between 11-15
 _____ more than 16

3. About how many times did you ride in a kayak on Newfound Lake last summer?

_____ between 0-5
 _____ between 6-10

_____ between 11-15
 _____ more than 16

You and your class answered the above questions. Collect data from your classmates for each question and place a tally mark from each student in the correct row.

Swim in lake	Tallies
0-5	
6-10	
11-15	
16+	

Motor boat rides	Tallies
0-5	
6-10	
11-15	
16+	

Kayak Trips	Tallies
0-5	
6-10	
11-15	
16+	

Make a prediction based upon the sample of data you collected. Do you think this data represents the water activity of all the residents living within the Newfound Lake watershed area? Explain

Practice:

- What was the range of swimming trips? _____
- What was the median number of swimming trips? _____



2.6 A Visit to the Newfound Lake Watershed

Name: _____

Using the information found on page 1 of the *Demographic and Growth Assessment: Newfound Lake Watershed Master Plan* answer the following questions about the population of the communities in the watershed:

1. In which town would you find the largest number of people? _____
This is called the **maximum** number of this set of data.
2. In which town would you find the smallest number of people? _____
This is called the **minimum** number of this set of data.
3. What is the **range** of this set of data? _____
Subtract the minimum from the maximum.
4. What is the **median** of this set of data? _____

Using the same table, answer the following questions about the acres (amount of land) in the communities of the watershed:

1. In which town would you find the largest number of acres? _____
This is called the **maximum** number of this set of data.
2. In which town would you find the smallest number of acres? _____
This is called the **minimum** number of this set of data.
3. What is the **range** of this set of data? _____
Subtract the minimum from the maximum.
4. What is the **median** of this set of data? _____

Is the community with the most number of people also the community with the largest number of acres? _____

Explain why you think the data looks the way it does

2.8 A Visit to the Newfound Lake Watershed - Study Link

Name: _____

When people plan for the future, many pieces of information are used to determine if an area is growing in population. Below is a table of the average (mean) daily traffic on local roadways in the watershed. With this information, planners can see where people travel and what roads might need repair.

Town	Location	2004	2005	2006
Alexandria	West Shore Rd @ Bristol Town Line		1100	
Alexandria	Washburn Road over Patten Brook		690	
Alexandria	Bailey Rd over Bog Brook		330	
Bridgewater	NH Rt 3A @ Hebron Line		3100	
Bridgewater	Dick Brown Rd over Clay Brook		320	
Bristol	NH Rt 3A @ Newfound River Bridge		7300	
Bristol	NH Rt 3A @ Bridgewater Town Line		4700	
Bristol	West Shore Road over Newfound River		4300	
Bristol	West Shore Road @ Fowler River Bridge		1800	
Groton	North Groton Road @ Hebron Town Line			720
Groton	North Groton Road @ Cockermonth River			400
Groton	Sculptured Rocks Rd over Atwell Brook			40
Hebron	North Shore Road over Cockermonth River		1100	
Plymouth	NH Rt 3A @ Hebron Town Line	3100		

1. What is the maximum number of trips on one road for one day?

2. What is the minimum number of trips on one road for one day?

3. How many more cars travel on Bailey Road than Dick Brown Road each day?

4. Which towns have more than two roads that were measured for traffic?

5. Which two roads had the same amount of traffic?

6. Which road do you think is closest to your house?

Practice:

7. $44+31=$ _____

8. $235-78=$ _____

9. $480+29=$ _____

10. $134-72=$ _____

3.6 A Visit to the Newfound Lake Watershed



Name: _____

Use the *Demographic and Growth Assessment: Newfound Lake Watershed Master Plan* as a reference to answer the following questions.

1. In the 35 years from 1970 to 2005, the population of the nine towns making up the Newfound Watershed area doubled in size. If the population doubles from 2005 to 2040, what will the new population be?

(estimate) _____

Write the number model

2. According to the 2000 census, the average age of people living within the watershed was _____ years old. Hebron has a median age of 50 and Bristol has a median age of 38.5. In which town would you expect to find the most children living? _____

3. In the Newfound Lake watershed area, each house contains about $2\frac{1}{2}$ people. How can this be possible?

4. How much has the median household income in New Hampshire increased from 1990 to 2000? _____

5. Most people in the watershed area drive cars/trucks/vans to work each day. About 14% of the people carpool and about 76% drive alone.

True or False About 60% more people drive alone than in carpools.