8 th Grad	e Science
Redland	s Middle School

Name			
Date	Period	Score	/4

Mary Had a Little Lamb Skill Builder

Wavelength (m)

1. This is a list of frequencies and wavelengths for the notes C through B on the keyboard. The values have been scrambled. Under the keyboard, write the correct frequency and wavelength for each note

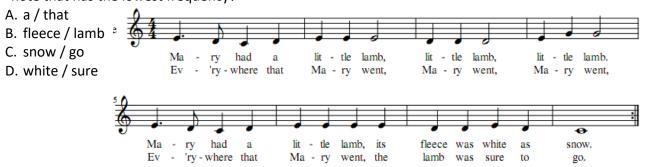
Frequencies (Hz)

	rrequeries (112)		·1	wavelength (iii	,		
		329		0.868			
		391		0.773			
		261		1.032			
		493		1.301			
		440		0.974			
		349		0.689			
		293		1.159			
·							
	\subset	D		F	G	В	
Frequency (Hz)							
Wavelength							

Describe the relationship between the frequency and the pitch for the notes:

- 2. As the frequency of a sound wave increases while it travels through air, the speed of the wave
 - A. Increases
 - B. Decreases
 - C. Stays the same
- 3. As the wavelength of a sound wave increases while it travels through air, the speed of the wave
 - A. Increases
 - B. Decreases
 - C. Stays the same
- 4. As the amplitude (loudness) of a sound wave increases while it travels through air, the speed of the wave
 - A. Increases
 - B. Decreases
 - C. Stays the same
- 5. Which of the following is NOT a mechanical wave?
 - A. X Ray
 - B. Seismic
 - C. Sound
 - D. Tsunami

- 6. Which of the following produced the highest pitch during "Trashin' the Camp"?
 - A. The clothesline
 - B. The wash tubs
 - C. The glass chimney of the lamp
 - D. The drawers of the dresser
- 7. Which of the following produced the lowest pitch during "Trashin' the Camp"?
 - A. The clothesline
 - B. The typewriter bell
 - C. The teapot
 - D. The silverware
- 8. During Mary Had A Little Lamb Lab, adding water to a wine glass
 - A. Raised the pitch
 - B. Lowered the pitch
 - C. Did not change the pitch
- 9. During Mary Had A Little Lamb Lab, adding water to a wine glass
 - A. Slowed the vibrations of the glass
 - B. Sped up the vibrations of the glass
 - C. Did not change the speed of the vibrations
- 10. During Mary Had A Little Lamb Lab, adding water to a wine glass
 - A. Lowered the frequency of the waves
 - B. Raised the frequency of the waves
 - C. Did not change the frequency of the waves
- 11. Below are the notes and lyrics for *Mary Had A Little Lamb*. Which word combination matches with the note that has the lowest frequency?



12. Which of the waves has the highest frequency?

