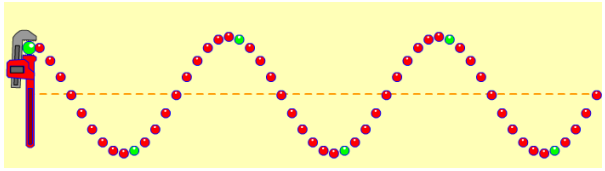
Properties of Waves – using the Wave on a string simulation
Author: Jackie Esler

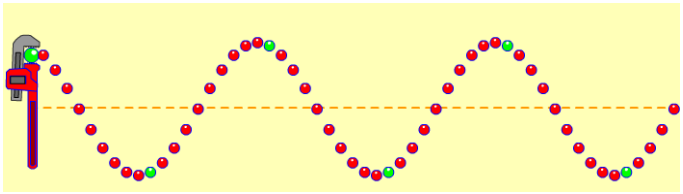
Wave-on-a-String

Pre-lab **Name:** _____

1. A wave is created on this string by moving the wrench up and down.

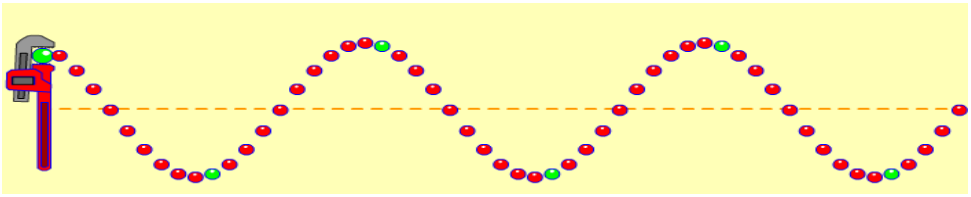


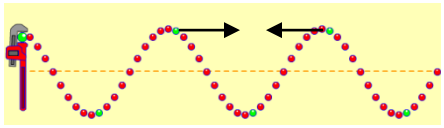
A. What would change if the wave had a higher **frequency**? _____
_____

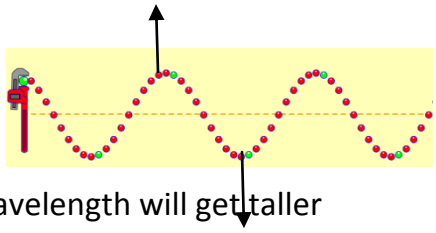


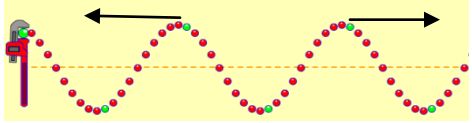
B. What would change if the wave had a higher **amplitude**? _____
_____

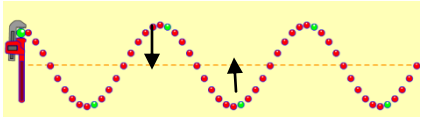
3. How will **increasing the frequency** of this wave **affect the wavelength**?



A. 
Wavelength will decrease

C. 
wavelength will get taller

B. 
Wavelength will increase

D. 
wavelength will get shorter

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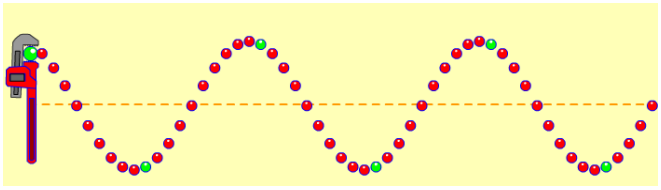
Wave-on-a-String **Name: _____**

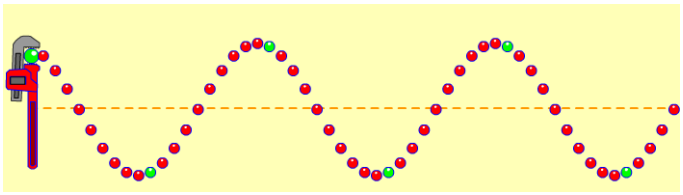
Post-lab

A wave is created on this string by moving the wrench up and down.



1. What would change if the wave had a higher **frequency**? _____

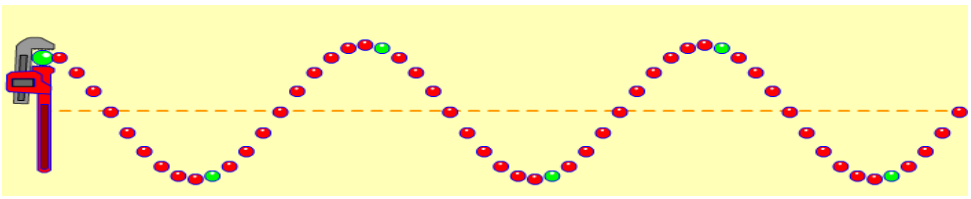
_____



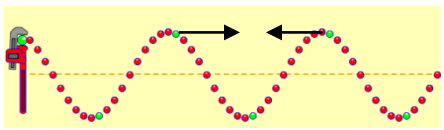
2. What would change if the wave had a higher **amplitude**? _____

_____

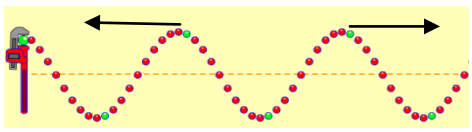
3. Which picture shows how **increasing the frequency** in the wave will **affect the wavelength**?



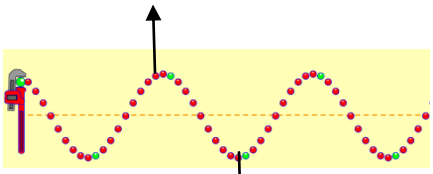
C.



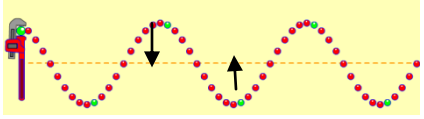
D.



C.



D.



4. Some of your friends are confusing frequency and amplitude. How would you describe these terms in **your own words or pictures** to help your friends understand each one?
(please write your answer on the back ⟶

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