

1. Draw a picture of a wave: label the wavelength, and the amplitude

2. How would you indicate the speed at which the wave moves? What would be the units?

3. How would you indicate the frequency of the wave? What would be the units of frequency?

4. Now draw a picture of a wave with the same velocity but twice the frequency. How does doubling the frequency affect the wavelength?

5. What is the relationship between the velocity of the wave, the wavelength and the frequency? (check the units)

6. Now draw two waves – and show what happens if they arrive at the same spot at the same time – in phase
7. Show what happens if they arrive out of phase.
8. Draw what you would expect to see if a narrow beam of light is passed through two slits (what sort of pattern). Why does this pattern occur?