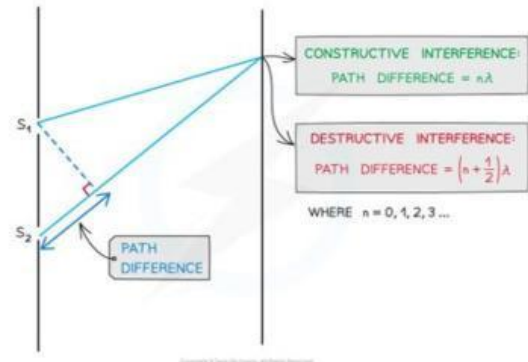
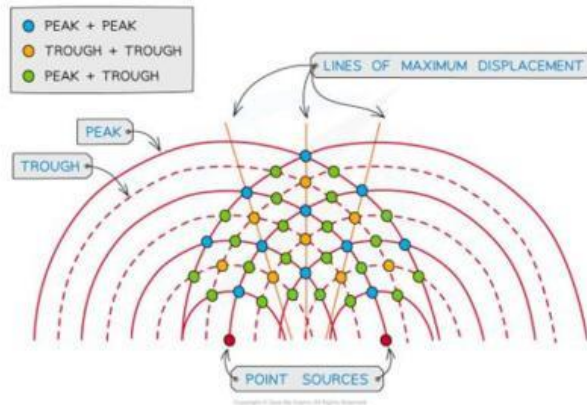


Two-source Interference

- Interference occur when two waves _____
- A two-source interference creates a pattern of _____ and _____ interference
- This pattern may be observed using ripple tanks, sound waves, light, and microwaves



- For interference to occur, the two sources must be **coherent**
- **Coherent:**
 - **Constant** _____
 - **Same** _____

interference	path difference		phase difference	
_____	$n\lambda$	$n = 1, 2, 3, \dots$	$n_e\pi$	$n_e = 2, 4, 6, \dots$
_____	$\frac{n_o}{2} \lambda$	$n = 1, 3, 5, \dots$	$n_o\pi$	$n = 1, 3, 5, \dots$