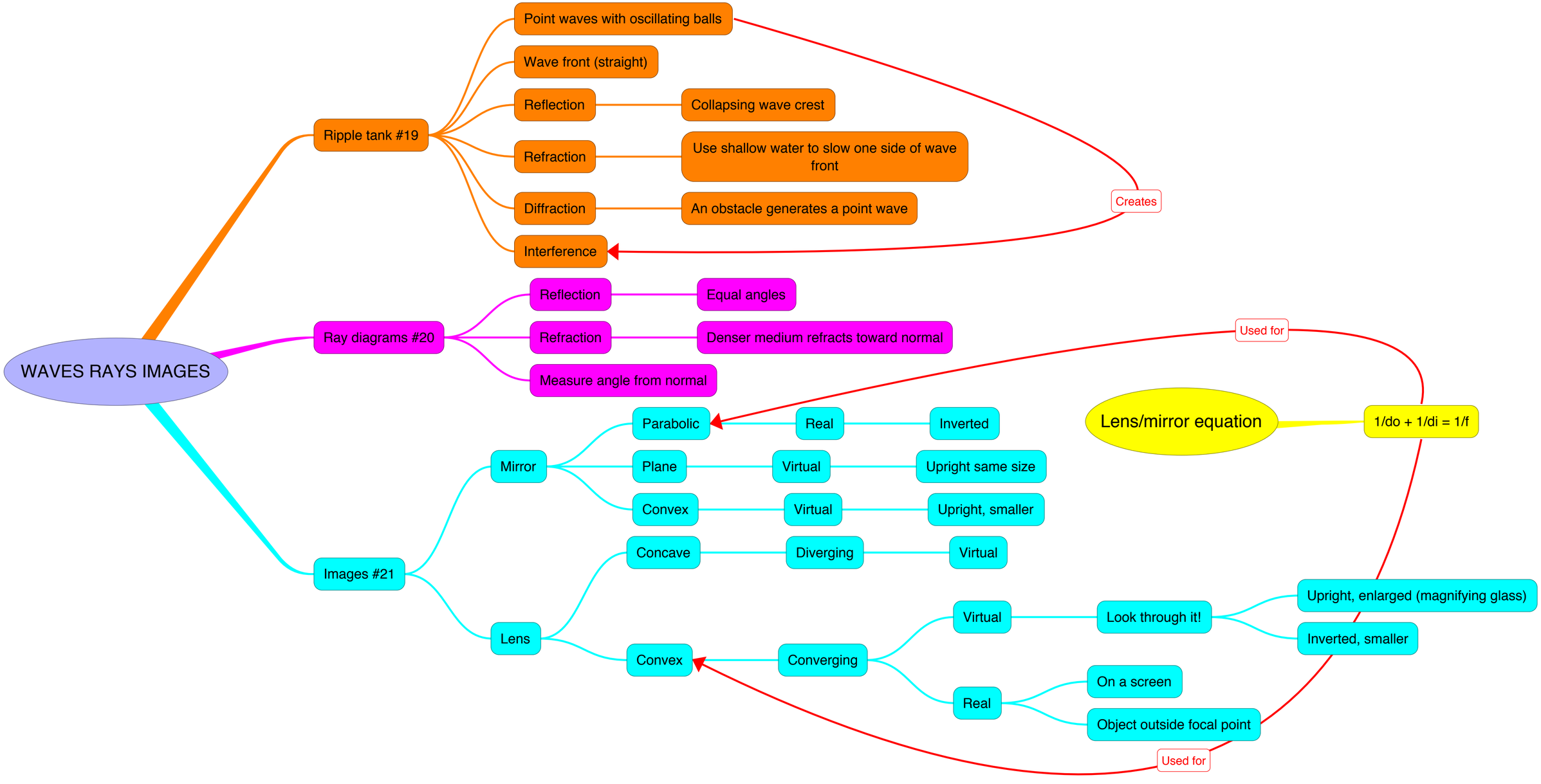
WAVES RAYS IMAGES
Ripple tank #19
Point waves with oscillating balls
Wave front (straight)
Reflection
Collapsing wave crest
Refraction
Use shallow water to slow one side of wave front
Diffraction
An obstacle generates a point wave
Interference
Creates
Ray diagrams #20
Reflection
Equal angles
Refraction
Denser medium refracts toward normal
Measure angle from normal
Images #21
Mirror
Parabolic
Real
Inverted
Plane
Virtual
Upright same size
Convex
Virtual
Upright, smaller
Lens
Concave
Diverging
Virtual
Convex
Converging
Virtual
Look through it!
Upright, enlarged (magnifying glass)
Inverted, smaller
Real
On a screen
Object outside focal point
Used for
Used for
Lens/mirror equation
1/do + 1/di = 1/f