# Wave phenomena

International Baccalaureate · IB Diploma · Physics · SL · Vocabulary in context

| Word | Example |
|---|---|
| **wavefront** /ˈweɪvfrʌnt/ | Each **wavefront** joins points on the same crest. |
| **ray** | A **ray** shows the direction of the wave. |
| **boundary** /ˈbaʊndəri/ | The **boundary** between air and glass bends the light. |
| **reflection** /rɪˈflekʃn/ | **Reflection** in a mirror lets you see yourself. |
| **normal** /ˈnɔːml/ | The **normal** is a line at 90° to the surface.<br>90° |
| **transmission** /trænˈsmɪʃn/ | **Transmission** means the wave passes through. |
| **refraction** /rɪˈfrækʃn/ | **Refraction** makes a straw look bent in water. |
| **refractive index** /rɪˈfræktɪv ˈɪndeks/ | Glass has a **refractive index** of 1.5.<br>1.5 |
| **Snell's law** /snelz lɔː/ | **Snell's law** links the angles of the rays. |
| **critical angle** /ˈkrɪtɪkl ˈæŋgl/ | The **critical angle** for glass is about 42°.<br>42° |
| **total internal reflection** /ˈtəʊtl ɪnˈtɜːnl rɪˈflekʃn/ | **Total internal reflection** keeps light inside an optical fibre. |
| **optical fibre** /ˈɒptɪkl ˈfaɪbə/ | An **optical fibre** carries internet data as light. |
| **diffraction** /dɪˈfrækʃn/ | **Diffraction** lets you hear sound around a corner. |



exercises.lol exercises.com.cn

| Word | Example |
|---|---|
| **aperture** | Light spreads out through a narrow **aperture**. |
| **principle of superposition** /ˈprɪnsɪpl ɒv ˌsuːpəpəˈzɪʃn/ | The **principle of superposition** says we add the waves. |
| **pulse** /pʌls/ | A quick flick sends a **pulse** along the rope. |
| **interference** /ˌɪntəˈfɪərəns/ | **Interference** makes loud and quiet places in a room. |
| **coherent** /kəʊˈhɪərənt/ | Two **coherent** sources have the same frequency. |
| **path difference** /pæθ ˈdɪfrəns/ | A **path difference** of one wavelength gives a bright fringe. |
| **constructive interference** /kənˈstrʌktɪv ˌɪntəˈfɪərəns/ | Two crests meet and give **constructive interference**. |
| **destructive interference** /dɪˈstrʌktɪv ˌɪntəˈfɪərəns/ | A crest and a trough meet and give **destructive interference**. |
| **fringe** /frɪndʒ/ | Each bright **fringe** is a place where the waves add. |
| **fringe separation** | The **fringe separation** is 2 mm.<br>2 mm |