# **Cymatics - Workshop Activities**

## String Harmonics - demonstration and limited participation (Primary age upwards)

- straight and loop
- Photographs

## Chladni Plates (metal and plastic) - demonstration and participation (Primary age upwards)

- bowed and vibration generator
- Granules sand and lycopodium on metal or plastic plate
- Sound prints on paper

### **Eidophone - (Primary age upwards)**

- Acoustic (using vocal sounds through a tube)
- Electric (using a keyboard/theremin app, amplifier and speaker with rubber membrane)
- Granules sand , pigment and lycopodium
- sound prints on paper

# Water-Sound - (suitable 15 to adults)

- Vibration generator and signal generator
- Water in Petri dish (or other vessel)
- Photographs/video

## Marble-Sound - (suitable 15 to adults)

- Vibration generator and signal generator
- Marble bath solution and ink in Petric dish (or other vessel)
- Sound prints on paper

## **Bubble-Sound - (Primary age upwards)**

- Vibration generator and signal generator
- Bubble solution and bubble plinth
- Photographs/video

#### Cornflower Ghosts - demonstration only (Primary age upwards)

- Vibration generator and signal generator
- Cornflower solution in petri dish
- Photographs

# History

- Of cymatics from Galileo to present day
- Cymatics images in art and graphics

#### How does it relate to science, visual art and sonic art

- **Science** standing waves with sound (fast vibrations)
- Sonic art harmonic ('sounds within sounds') sound synthesis
- Visual art shapes and patterns, symmetrical and non-symmetrical

#### ARTISTS: (links to practitioners and artists - visual and sonic - for inspiration)

Visual artists: Graphic and video art (Lord of The Rings credits)

Sound artists: Composers Anderson and Harvey (spectral music)