

# TOTAL INTERNAL REFLECTION

**EMPTY GLASS BOTTLE**      **DETTOL BOTTLE**      **LASER POINTER**

**INCENSE STICK**      **GLASS OF WATER**

**1** FILL BOTTLE HALF WITH WATER AND ADD A FEW DROPS OF DETTOL.

**2** POINT LASER PARALLEL TO THE WATER LEVEL. THE BEAM WILL GO STRAIGHT.

**3** POINT BEAM AT VARIOUS ANGLES. AT CRITICAL ANGLE YOU WILL SEE "TOTAL INTERNAL REFLECTION".

**4** FILL SMOKE WITH AN INCENSE STICK IN THE BOTTLE. THEN SHUT ITS LID.

**5** POINT LASER FROM BELOW. GOING FROM DENSER TO A RARER MEDIUM THE BEAM WILL BEND AWAY FROM THE NORMAL.