

## Refraction

As you work through the steps in the lab procedure, record your experimental values and the results on this worksheet. Use the exact values you record for your data to make later calculations.

### Data

#### Step 1

Record your data in the table using one decimal place. Please do not include units in your answers. (Enter NONE in any unused answer blanks.)

**Table 1**

Top (Yellow) Medium	Bottom (Blue) Medium	Angle of Incidence (°)	Angle of Reflection (°)	Angle of Refraction (°)
Air	Water	30.0°		
		45.0°		
		60.0°		
		75.0°		
Air	Flint Glass F 3	30.0°		
		45.0°		
		60.0°		
		75.0°		

## Step 2

Record your data in the table using one decimal place. Please do not include units in your answers. (Enter NONE in any unused answer blanks.)

**Table 2**

Top (Blue) Medium	Bottom (Yellow) Medium	Angle of Incidence (°)	Angle of Reflection (°)	Angle of Refraction (°)
Water	Air	25.0°		
		35.0°		
		45.0°		
		55.0°		
Flint Glass F 3	Water	25.0°		
		35.0°		
		45.0°		
		55.0°		
		65.0°		

## Questions

For light traveling from water and into air, what is the minimum angle for total internal reflection? (Enter your answer to one decimal place.)

For light traveling from flint glass and then into water, what is the minimum angle for total internal reflection? (Enter your answer to one decimal place.)