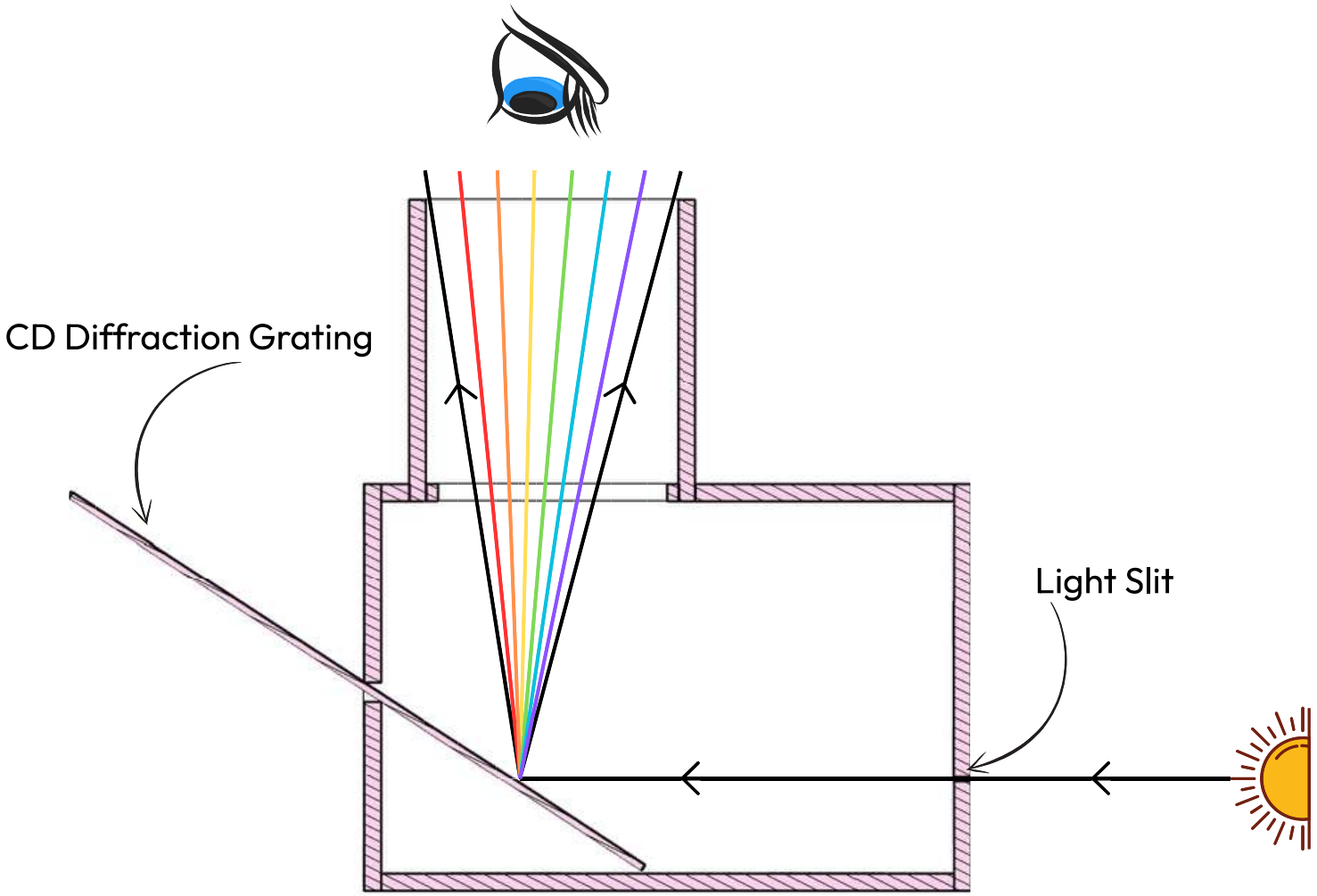
Spectroscope Info Sheet

A spectroscope is a tool that lets us see what colors of light are coming from a light source—like a light bulb or even the sun. Every type of light has its own mix of colors, and the spectroscope helps us break the light apart, kind of like a prism does.

Now here's the cool part: we can make a spectroscope using a CD! The shiny surface of a CD has tiny grooves—like microscopic lines—that act as a diffraction grating. When light hits the CD, these lines bend the light at different angles depending on the color (or wavelength). **This bending is called diffraction.**

Since different colors of light bend by different amounts, the CD spreads the light out into a rainbow, showing us the full visible spectrum—from red to violet. By looking into your spectroscope, you can clearly see all the colors that make up the light you're looking at. Now you've got a science tool that lets you explore the hidden rainbows in everyday light!



Periscope Worksheet

Use the diagram below to draw the path of light through the periscope.