This investigation delves into the fundamental principles of light behavior, specifically reflection and refraction. It aims to explore Snell's Law, a crucial relationship governing the bending of light as it passes through different mediums. The investigation will utilize Snell's Law to calculate the index of refraction, a property that characterizes how light interacts with a given material. Finally, the phenomenon of total internal reflection will be examined, where light is completely reflected back into the original medium due to a specific angle of incidence.