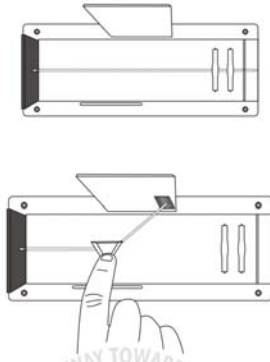


Instead of concave mirror, if you use convex mirror, you will observe its divergence property.

**Dispersion of light**

Insert single slit, insert screen as shown. Place the prism and hold the arrangement in sunlight, you will observe a spectrum on the



**RAY PLATFORM**

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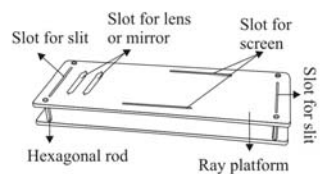
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**RAY PLATFORM**

Do all the ray optics experiments with sunlight.

**Assembly :** Consists of a 3 mm white acrylic plate (250x100 mm ) with 6 slots of different sizes. Out of 6, two of which are at the ends along the length are for inserting slits. Two of which are at the ends along the width are for inserting screen. The remaining two slots which are of size 45x7 mm are for inserting lens or mirror. This acrylic plate is supported with 4 hexagonal rods of 1 inch length and another 3 mm MDF sheet of the size that of white acrylic plate. A single slit, a triple slit and white screen are part of the kit.

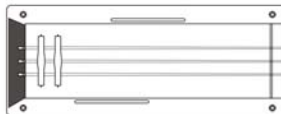


**To do and observe.**

**Step 1 :** Insert the single slit in the slot provided for it as shown in the diagram, and hold it to the sunlight. You will observe that a ray of light appears on the platform.



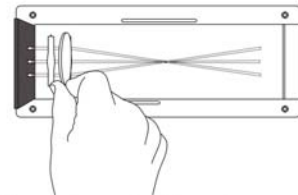
**Step 2 :** Remove the single slit and insert a triple slit in the same slot as shown in the diagram. Now you will observe that 3-parallel rays appear on the platform when you hold it to the sunlight.



Using these ray patterns on the platform you can do the experiments related to reflection of light by plane mirror, concave and convex mirror, refraction of light with slabs, lenses and prisms. Some of the examples are explained here.

**convergence by a convex lens**

Insert triple slit and a convex lens as shown. You will observe the convergence property of convex lens.



Instead of convex lens, if you place concave lens you will observe the divergence property.

**Convergence by a concave mirror**

Insert triple slit and a concave mirror as shown in the diagrams. You will observe the convergence property of a concave mirror.

