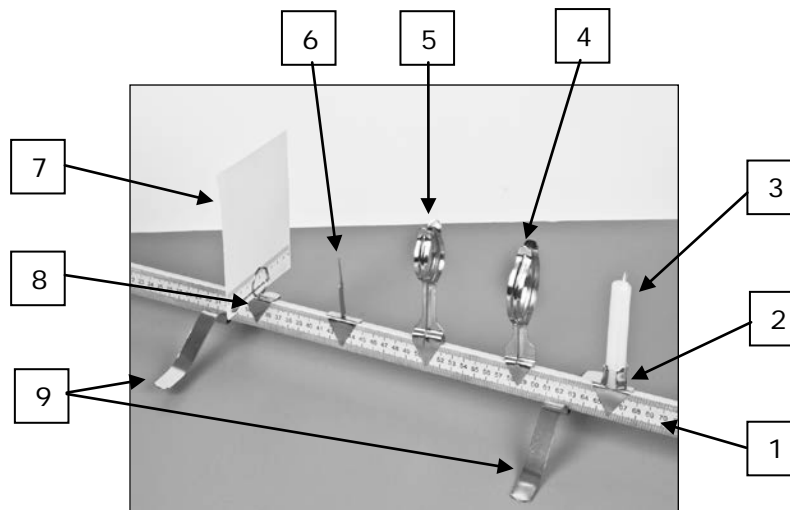


OPERATING INSTRUCTIONS

AND SUGGESTED ACTIVITIES

METER STICK OPTICAL BENCH

OBSET1, OBSET2-NS



DESCRIPTION

The Meter Stick Optical Bench is a set of optical parts for demonstrating image formation by lenses and mirrors and for verifying the thin lens formula for locating images. The parts of the set are shown in the picture above:

- | | | | |
|------------------------------|-------------------|-------------------|------------------------------|
| 1 Meter stick* | 2 Candle holder | 3 Paraffin candle | 4 Lens & mirror holder, 75mm |
| 5 Lens & mirror holder, 38mm | 6 Marker & object | 7 Screen | 8 Screen holder |
| 9 Meter stick supports | | | |

*Not included in Item OBSET2-NS.

The parts fit onto a standard meter stick as shown, and hold the optical elements in a straight line for optimal image formation. The pair of meter stick supports holds the meter stick upright and parallel to the bench. The v-shaped saddles of the optical part supports allow the exact positions of the optical parts to be easily read on the meter stick, and the set includes five card screens (7), each 10 x 12.5 cm with printed millimeter scales on both sides

BACKGROUND

Lenses and mirrors can form images of objects that emit or reflect light. The images can be real or virtual. Real images can be captured on a screen, while virtual images can only be observed by eye. Convex lenses and concave mirrors can produce both real and virtual images, while concave lenses, plane mirrors, and convex mirrors can only produce virtual images.