CONTENTS	vii
EXERCISE	
53.—Study the method of mixtures, and find the water equivalent	PAGE
of a calorimeter	60
54.—Find the specific heat of copper	63
55.—Find the melting-point of paraffin or of beeswax	65
56.—Study the effect of salt upon the boiling point of water	66
57.—Find the lowest temperature obtainable with a mixture of snow and salt	66
58.—Determine the cooling curve through change of state (solidification)	67
59.—Find the heat of fusion of ice	
60.—Find the heat of vaporization of water .	67
61.—Find the dew-point	68
62.—Find the relative conductivities of some metals	70
63.—Determine (approximately) the mechanical equivalent of heat,	71
i.e., find the amount of energy which is equivalent to unit quantity of heat	
	72
PART VI-LIGHT	
64.—Study the images produced through small apertures	73
65.—Use of a photometer	74
66.—Establish the laws of reflection (Optical disc)	76
67.—Establish the law of reflection	77
68.—Show that when a mirror is rotated through an angle the reflected ray is rotated through twice that angle	78
69.—Measure the angle of a prism	79
70.—Study the images in a plane mirror	80
71.—Study the images in parallel mirrors	80
72.—Study the images in a thick mirror	81
73.—Study the images in inclined mirrors	81
74.—Study the images produced by concave and convex mirrors .	81
75.—Find the radius of curvature of a concave spherical mirror .	83
76.—Find the radius of curvature of a convex spherical mirror. (First method; alternative to Exercise 77)	85
77.—Find the radius of curvature of a convex spherical mirror	
(Second method; alternative to Exercise 76). 78.—Investigate by means of the optical disc the refraction of light	86
(1) from air to water, (2) from air to glass, (3) from glass to air.	87
79.—Find the index of refraction of glass	87
80.—Study the images produced by concave and convex lenses .	89
81.—Find the focal length of a convex lens	90
82.—Find the focal length of a concave lens. (First method; alternative to Exercise 83 or Exercise 84).	91
83.—Find the focal length of a concave lens. (Second method:	
alternative to Exercise 82 or Exercise 84).	92