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MASTERING PHYSICS

THIRD EDITION

H. J. P. KEIGHLEY
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CONTENTS

<i>Preface to the First Edition</i>	xiii
<i>Preface to the Revised Edition</i>	xiv
<i>Preface to the Third Edition</i>	xv
<i>Acknowledgements</i>	xvi

I. MECHANICS

1 Fundamental concepts	1.1 Length	3
	1.2 Metric prefixes	3
	1.3 Force	3
	1.4 Measurement of force	5
	1.5 Load-extension graphs	6
	1.6 Mass	6
	1.7 Weight	7
	1.8 Measuring time	8
	1.9 Volume	8
	1.10 Measuring volume	9
	1.11 Density	9
	1.12 Air density	10
2 Pressure	2.1 The concept of pressure	12
	2.2 Pressure in liquids	14
	2.3 The pressure due to a column of liquid	16
	2.4 Upthrust	17
	2.5 Measuring pressure	18
	2.6 Atmospheric pressure	19
	2.7 A simple barometer	20
	2.8 The aneroid barometer	21
	2.9 Airliners and spacesuits	22
3 Vectors	3.1 Addition of physical quantities	24
	3.2 An experiment on addition of forces	24
4 Motion	4.1 Definition of terms	28
	4.2 Newton's first law of motion	28
	4.3 Newton's second law of motion	31

CONTENTS

	4.4	The unit of force, the newton	34
	4.5	Newton's third law of motion	35
	4.6	Momentum and impulse	35
	4.7	Conservation of momentum	36
	4.8	Rocket and jet motors	37
	4.9	Acceleration in free fall	37
	4.10	Frictional forces in solids	38
	4.11	The importance of friction	40
	4.12	Uniformly accelerated motion	41
	4.13	Motion graphs	42
5	5.1	Levers in everyday life	44
Levers and centres of gravity	5.2	An experiment to investigate the turning effect of a force	44
	5.3	Centre of gravity	47
	5.4	Determining the position of the centre of gravity	47
	5.5	Stability	49
	5.6	Couples	50
6	6.1	Some definitions	53
Work, energy and power	6.2	Various forms of energy	53
	6.3	Electrical energy	54
	6.4	Kinetic energy (KE)	55
	6.5	Potential energy (PE)	56
	6.6	Conservation of energy	58
	6.7	Heat energy	58
	6.8	Energy conversion in a power station	59
	6.9	Power	59
	6.10	The energy crisis	59
7	7.1	Introduction	62
Machines	7.2	An experiment with pulleys	62
	7.3	The inclined plane	64
	7.4	Levers	65

II. HEAT AND MOLECULAR STRUCTURE

8	8.1	Introduction	69
Heat energy	8.2	Frictional heating	69
	8.3	Specific heat capacity	69
	8.4	Specific heat capacity by an electrical method	71
	8.5	A basic equation	72

	8.6	Different specific heat capacities	72
9 Expansion	9.1	Demonstration of expansion	74
	9.2	Large forces involved in the expansion of a solid	74
	9.3	Expansion – friend or foe?	74
	9.4	Linear expansivity	76
	9.5	Bimetallic strip	78
	9.6	Calibration of a mercury thermometer	79
	9.7	The clinical thermometer	80
	9.8	Molecular explanation of expansion	80
10 Properties of gases and molecular structure	10.1	The molecular theory of matter	82
	10.2	Molecules in solids	82
	10.3	Molecules in liquids	83
	10.4	The size of a molecule	84
	10.5	Molecules in gases	84
	10.6	Diffusion	85
	10.7	Brownian movement	86
	10.8	Boyle's law for a gas at constant temperature	87
	10.9	Gas pressure law at constant volume	89
	10.10	Charles' law for a gas at constant pressure	90
	10.11	The kinetic theory for gases	92
11 The transfer of heat energy	11.1	Introduction	95
	11.2	Conduction	95
	11.3	An explanation of conduction	97
	11.4	Convection	97
	11.5	Radiation	99
	11.6	Reflection and refraction of radiation	100
	11.7	Emitters and absorbers of radiation	100
	11.8	The vacuum flask	102
	11.9	Heat problems in supersonic aircraft and satellites	102
	11.10	The greenhouse effect	103
	11.11	Hot water and central heating	103

CONTENTS

12 Change of state	12.1 Latent heat	105
	12.2 Measuring specific latent heat	106
	12.3 When a liquid evaporates, it cools	107
	12.4 Distinction between evaporation and boiling	108
	12.5 The body's cooling system and refrigerators	109
	12.6 An increase in pressure lowers the melting point	110
	12.7 The binding of snowballs	110
	12.8 A decrease in pressure lowers the boiling point	111
	12.9 Pressure cookers	112

III. WAVE MOTION, LIGHT AND SOUND

13 Waves	13.1 Introduction	115
	13.2 Describing waves	115
	13.3 Transverse waves	116
	13.4 Longitudinal waves	117
	13.5 Observing and measuring travelling waves	118
	13.6 The wave equation	120
	13.7 Wave velocity	121
	13.8 Energy in waves	122
	13.9 Properties of travelling waves	122
	13.10 Standing waves	131
14 Reflections and shadows	14.1 Rays of light	133
	14.2 Laws of regular reflection	133
	14.3 The image in a plane mirror	135
	14.4 Uses of plane mirrors	137
	14.5 Diffuse reflection	137
	14.6 Shadows	138
15 Refraction	15.1 Introduction	140
	15.2 Refraction at an air-glass interface	140
	15.3 Refractive indices	143
	15.4 The reversibility of a ray of light	144
	15.5 Internal reflections	145

	15.6	Some applications of total internal reflection	146
	15.7	Real and apparent depths	148
16 Thin lenses and curved mirrors	16.1	Action of a lens	151
	16.2	Optical centre and focal point	152
	16.3	The power of a lens	153
	16.4	Measuring the focal length of a converging lens	154
	16.5	Images produced by lenses	154
	16.6	The action of a curved mirror	157
	16.7	The principal focus and focal length	158
	16.8	Uses of lenses and mirrors	159
17 Optical instruments	17.1	The pinhole camera	160
	17.2	The camera with a lens	161
	17.3	The slide projector	162
	17.4	A radio telescope	163
18 The electromagnetic spectrum	18.1	Visible light	164
	18.2	Detectors of light	166
	18.3	The extended spectrum	166
	18.4	Colour addition	169
	18.5	Colour subtraction	171
	18.6	Coloured objects seen in coloured lights	171
19 Sound	19.1	Introduction	173
	19.2	Measurement of the frequency of sound waves	174
	19.3	Measuring the velocity of sound in air by an echo method	174
	19.4	Diffraction and interference of sound waves	175
	19.5	The pitch, loudness and quality of a musical note	176
	19.6	Absorption of sound waves	177
	19.7	Resonance	178

CONTENTS

IV. ELECTRICITY, ATOMIC AND NUCLEAR PHYSICS

20 Magnetism	20.1 Properties of magnets	183
	20.2 The test for magnetism	184
	20.3 Making a magnet	184
	20.4 Induced magnetism	185
	20.5 Properties of soft iron and steel	185
	20.6 Magnetic fields	186
21 Electrons and electron beams	21.1 Charging by friction	189
	21.2 Positive and negative charge	189
	21.3 Protons and electrons	190
	21.4 Charging by induction	190
	21.5 Ionisation	191
	21.6 Lightning and lightning conductors	192
	21.7 The cathode ray oscilloscope	192
22 Electric circuits	22.1 Electric current	198
	22.2 Electric potential difference (voltage)	199
	22.3 Series and parallel circuits	200
	22.4 Current in series and parallel circuits	201
	22.5 Potential difference in series and parallel circuits	203
	22.6 Electrical resistance	204
	22.7 Combination of resistors	207
	22.8 The potential divider circuit	210
	22.9 Capacitors	211
23 Magnetic effects of an electric current	23.1 The magnetic field produced by an electric current	215
	23.2 The magnetic field produced by a solenoid	216
	23.3 Force on a current-carrying conductor in a magnetic field	217
	23.4 The electric motor	219
	23.5 The moving-coil loudspeaker	222
24 Energy and power from electrical sources	24.1 Electrical power and energy	224
	24.2 The mains supply	225
	24.3 Domestic wiring	226

	24.4	Electrical connection to the mains supply	227
	24.5	The earth lead	228
	24.6	The kilowatt-hour	229
25 Electromagnetic induction	25.1	Introduction	231
	25.2	The size of the induced e.m.f.	233
	25.3	The direction of the induced current	233
	25.4	The alternating-current generator	234
	25.5	The direct-current generator	237
	25.6	An induced e.m.f. due to a changing current	237
	25.7	The transformer	238
	25.8	Step-up and step-down transformers	240
	25.9	The efficiency of a transformer	240
	25.10	The distribution of electrical energy	241
26 Radioactivity and the atom	26.1	The spark counter	244
	26.2	The Geiger-Müller tube	244
	26.3	The diffusion cloud chamber	245
	26.4	The properties of the ionising radiations emitted from radioactive substances	246
	26.5	The nature of α , β and γ radiation	249
	26.6	The mechanism of radioactive emissions	249
	26.7	Radioactive sources	251
	26.8	Radioactive decay	252
	26.9	Safety precautions and uses	254
	26.10	Nuclear Fission	255
27 Electronics	27.1	Introduction	257
	27.2	The diode	257
	27.3	Bridge rectifier circuit	258
	27.4	Smoothing the output from a bridge rectifier	259
	27.5	A low voltage power supply	259
	27.6	LEDs, LDRs and thermistors	260

CONTENTS

27.7	The transistor	261
27.8	Using transistors	262
27.9	Logic gates	266
27.10	Combining logic gates	268
27.11	The bistable	269
27.12	An operational amplifier	272
27.13	Operational amplifier as a switch	277
	<i>Questions</i>	281
	<i>Answers to Questions</i>	324
	<i>Index</i>	328

PREFACE TO THE

FIRST EDITION

The book aims to provide a concise, easily readable treatment of all the essential principles contained in O-level physics courses. We have tried to present them with a directness and simplicity that will enable students to achieve maximum comprehension in the shortest possible time. Many diagrams have been included in the text as these are a great help in understanding physics and are especially useful in revision.

Important laws and definitions are set in italic type.

SI units have been used throughout.

Marlborough, 1982

H. J. P. K.
F. R. McK.
A. C.
M. J. H.

PREFACE TO THE

REVISED EDITION

In this edition we have added some worked examples and provided answers to the questions at the end of the book. We have also extended one or two sections to provide more comprehensive coverage of the many different O-level syllabuses, and have made a few minor changes in the text to improve its clarity.

Marlborough, 1983

H. J. P. K.
F. R. McK.
A. C.
M. J. H.

PREFACE TO THE

THIRD EDITION

We have changed the contents to bring the text into line with the proposed GCSE syllabuses. In particular, we have added a chapter on electronics, deleted topics such as electrolysis and most of the work on curved mirrors. We have added further worked examples and taken the opportunity to make other changes in order to make the book as helpful as possible to students studying for GCSE.

Marlborough, 1986

H. J. P. K.
F. R. McK.
A. C.
M. J. H.

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Part I The Columbia space shuttle being launched at Cape Canaveral (courtesy Space Frontiers Ltd).

Part II The European Space Agency's European communications satellite (courtesy British Aerospace).

Part III Approach and runway lights as seen from the flight deck of an aircraft (courtesy British Aerospace).

Part IV The lights of Piccadilly Circus (courtesy United Kingdom Atomic Energy Authority).

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