## 530 WHI 5th ed.

1,	OFFICAL ILLUSIONS	1	23	SOURCES OF MIUSICAL SOUNDS	221				
2	Units of Measurement, Speed, and		26	ELECTRICITY AT REST	233				
	VELOCITY	10	27	ELECTRICITY IN MOTION	242				
-	Acceleration	19	28	KIRCHHOFF'S LAWS AND ELECTRICAL					
4	GRAVITY AND FALLING BODIES	25		CIRCUITS	250				
5	Newton's First and Second Laws		29	ELECTRIC FIELDS, POTENTIAL, AND					
	OF MOTION	33		CAPACITANCE	256				
6	VECTOR ADDITION AND COMPOSITION		<b>30</b>	MAGNETISM	264				
	of Forces	42	31	EFFECTS OF ELECTRIC CURRENTS	274				
7	NEWTON'S LAW OF GRAVITATION AND		32	MAGNETIC INDUCTION	284				
	THIRD LAW OF MOTION	54	33	INDUCED ELECTRIC CURRENTS	292				
	FRICTION AND STREAMLINING	61	34	DIPOLE MOMENTS AND MAGNETISM	299				
	Projectiles	70	35	Transformers	310				
10	Work, Energy, and Power	80	<b>36</b>	ALTERNATING CURRENTS	318				
[1	CONSERVATION OF ENERGY	87	37	PROPERTIES OF LIGHT	327				
	CONSERVATION OF MOMENTUM	93	38	REFRACTION	337				
13	CIRCULAR MOTION AND KEPLER'S		39	DISPERSION	<b>346</b>				
	Laws	102	40	Lenses	354				
4	GRAVITATIONAL FIELDS AND ORBITING		41	OPTICAL INSTRUMENTS	363				
	SATELLITES	-111	42	THE SCIENCE OF COLOR	373				
15	CENTER OF MASS AND ROTATIONAL		43	DIFFRACTION AND INTERFERENCE OF					
	Equilibrium	120		LIGHT	381				
16	KINEMATICS AND DYNAMICS OF		44	THE POLARIZATION OF LIGHT	394				
	ROTATION	130	45	LIGHT SOURCES AND SPECTROGRAPHS	404				
	Properties of Solids and Liquids	140	46	CLASSIFICATION OF SPECTRA	411				
8	Properties of Gases, and Fluids in		47	THE ATOMIC STRUCTURE OF MATTER	419				
	MOTION	150	48	THE DISCOVERY OF THE ELECTRON	427				
9			49	Atoms and the Periodic Table	435				
	THERMAL EXPANSION	164	50	THE PHOTOELECTRIC EFFECT	444				
20	HEAT TRANSFER AND THE ATMOSPHERE	175	51	THE STRUCTURE OF ATOMS	452				
1	THERMODYNAMICS, AND ROCKET		52	SPINNING ELECTRONS	461				
	Engines	184	53	X RAYS	473				
	VIBRATIONS AND WAVES	193	54	ELECTROMAGNETIC WAVES AND					
23				VACUUM TUBES	482				
	DETECTION	202	55	THE SOLID STATE AND SEMICON-					
4	RESONANCE, BEATS, DOPPLER EFFECT,			DUCTORS	492				
	AND INTERFERENCE	211	56	Moving Frames of Reference	502				
iv .									

x	•	CONT	ENTS		
57	Interferemeters and Lasers	512		APPENDICES	
58 59	RELATIVITY ELECTRON OPTICS	524 532	I	Values of the General Physical Constants	727
60 61	RADIO, RADAR, TELEVISION, AND MICROWAVES PHOTON COLLISIONS AND ATOMIC	541	II III IV	Units and Their Abbreviations Trigonometric Tables Common Logarithms	728 729 730
	Waves	552	V	The Slide Rule	732
62 63	RADIOACTIVITY DISINTEGRATION AND TRANSMUTATION	566 574	VI VII	Elements of Trigonometry Complete List of the Stable Isotopes	737
64 65	BETA AND GAMMA RAYS ATOMIC COLLISIONS AND NUCLEAR	584	VIII	of the Chemical Elements Relative Masses of One Stable Iso-	741
66	DISINTEGRATION COSMIC RAYS	593 604		tope for Each of the Elements	743
67 68	ATOMIC PARTICLE ACCELERATORS TRANSMUTATION OF THE ELEMENTS	617 627		Table of Isotopes and Their Properties	744
69	NEUTRON AND GAMMA-RAY		X	The Periodic Table of Chemical Elements	747
70	REACTIONS SPECIAL ATOMIC AND NUCLEAR	642	XI XII	Electron Subshells Nobel Prize Winners in Physics	748 749
71	EFFECTS THE ATOMIC NUCLEUS	653 662	XIII	Powers of Ten Notation, and	
72	FISSION AND FUSION	672		Algebra	751
73	Nuclear Energy	684		INDEX	<b>75</b> 5
74	ELEMENTARY PARTICLES	698			
75	FIELD THEORY AND WORLD LINES	715			