



## Life Science

Matter and Energy in (	Organisms and Ecosystems	48
What Plants Need		50
How Plants Get Energy		52
Materials for Plant Growth.		54
NATIONAL GEOGRAPHIC LEARNING Case Study	Growing Crops	56
Investigate Hydroponics		60
NATIONAL GEOGRAPHIC LEARNING Think Like a Scientist	Support an Argument	62
Why Animals Need Food		64
Desert Food Chain		66
NATIONAL GEOGRAPHIC Think Like a Scientist	Compare and Contrast	68

70
72
74
76
78
80
82
84
86
88
92

## **Earth Science**

96
98
100
102
104
106
108
110
112
114
116
118
120

MATIONAL GEOGRAPHIC GE	122
Water on Earth	Mary Control of the Party of th
Investigate Graphing Water Data	R. Change
Earth's Resources	
Humans Impact the Land	130
Humans Impact Vegetation	132
Investigate Plants and Pollution	134
Humans Impact Water	136
	::



## Earth Science (continued)

Humans Impact Air	138
Humans Impact Space	140
Protecting Land, Air, and Water SCIENCE in a SNAP	142
NATIONAL GEOGRAPHIC LEARNING Case Study  Think Like an Engineer Tower of Trees	144
Renewable Energy Resources	148
Investigate Using Solar Energy	150
MATIONAL GEOGRAPHIC LEARNING  Think Like a Scientist Obtain and Combine Information of the second se	tion152
Gravity on Earth	154
Investigate Gravity	156
Earth, Sun, and Moon	158
Our Star— the Sun SCIENCE in a SNAP	154
Investigate Apparent Brightness	162
Day and Night SCIENCE in a SNAP	164

Apparent Motion SCIENCE in a SNAP	166
Investigate Sunlight and Shadows	168
Revolution and the Seasons	170
Investigate Graph Hours of Daylight	172
Earth's Orbit and the Night Sky	
NATIONAL GEOGRAPHIC LEARNING Think Like a Scientist Represent Data	176
Moon Motions	
Moon Phases	180
Investigate Moon Phases	182
NATIONAL GEOGRAPHIC Science Career Astrobiologist and Science Educator	184
Glossary	188
Index	195
Consultants Credits and Convright	202