Week 1—Schedule
Module 1

Date:	Day 1 [1]	Day 2 [2]	Day 3 [3]	Day 4 [4]	Day 5 [5]
Science					
Exploring Creation with Physics	pp. 1–4	pp. 5–12 (top)	pp. 12–16 (through first full para.)	pp. 16 (para. above graph)–21(top)	pp. 21–23 (top)
Exploring Creation with Physics–CD ROM [1]	"Introductory Remarks"	"Introduction" through second "On Your Own"	"Speed and Velocity 2" through sixth para. in "Average and Instantaneous Velocity 2"	"Average and Instantaneous Velocity 2" (para. above Fig. 1.3) through "Average and Instantaneous Velocity 3"	"Velocity Is Relative" through one "On Your Own"
Multimedia Companion CD		Examples 1.1 and 1.2	Example 1.3	Example 1.4	
On Your Own		1.1–1.2	1.3	1.4–1.6	1.7
Experiments			1.1		
Vocabulary [2]	❑	❑	❑	❑	
Supplies [3]	**You Provide:** stopwatch, pile of books, pencil, ball, wooden board about 1 meter long, safety glasses.				
Shopping/Planning List	**For next week:** **We Provide:** masking tape. **You Provide:** stopwatch, pile of books, pencil, ball, uncarpeted floor, wooden board about 1 meter long, safety glasses.				
Other Notes					

1. The "*Exploring Creation with Physics*–CD ROM" schedule is for the full course CD ROM version of the text. It is identical to the page designations given for the text, *Exploring Creation with Physics*. You will use either the textbook *Exploring Creation with Physics* or the CD ROM version. You do not need both versions to complete this course.

2. Define vocabulary terms and names found in each day's reading, then place a check in the box.

3. When supplies are listed as **"We Provide:"** they are materials found in either your Physics Supplies Kit (**450–15**) or the Non-Consumable Supplies Kit (**NSK**). When supplies are listed as **"You Provide:"** they are materials you can generally find around your home.

Vocabulary Terms and Important Facts

Review from Chemistry

Introductory Remarks

Significant figures—(p. 3) A digit within a number is considered to be a significant figure if:

1. It is non-zero OR
2. It is a zero that is between two significant figures OR
3. It is a zero at the end of the number and to the right of the decimal point.

Adding and Subtracting with Significant Figures—(p. 4) When adding and subtracting measurements, round your answer so that it has the same precision as the least precise measurement in the equation.

Multiplying and Dividing with Significant Figures—(p. 4) When multiplying and dividing measurements, round the answer so that it has the same number of significant figures as the measurement with the fewest significant figures.

Distance and Displacement

Displacement—(p. 6) The change in an object's position.

Vector quantity—(p. 6) A physical measurement that contains directional information.

Scalar quantity—(p. 6) A physical measurement that does not contain directional information.

Speed and Velocity

Velocity—(p. 8) The time rate of change of an object's position.

Velocity equation—(p. 9) $v = \frac{\Delta x}{\Delta t}$

Speed—(p. 9) The time rate of change of the distance traveled by an object.

Speed equation—(p. 9) $Speed = \frac{\Delta d}{\Delta t}$

Average and Instantaneous Velocity

Instantaneous velocity—(p. 13) The velocity of an object at one moment in time.

Average velocity—(p. 13) The velocity of an object over an extended period of time.

Average and Instantaneous Velocity 2

The slope of a position-versus-time curve is the velocity. (p. 17) ■

Week 18—Schedule
Module 8

Date:	Day 1 86	Day 2 87	Day 3 88	Day 4 89	Day 5 90
Science					
Exploring Creation with Physics	pp. 251–254 (mid-page)	pp. 254–257	pp. 258–264 (bottom)	pp. 264 (last para.) –269 (mid-page)	pp. 269–273 (mid-page)
Exploring Creation with Physics–CD ROM	"Introduction" through one "On Your Own"	"Kinetic and Potential Energy" through second "On Your Own"	"The First Law of Thermodynamics" through two "On Your Own"	"First Law of Thermodynamics 2" through "Friction Work and Energy"	Experiment 8.2 through second "On Your Own"
Multimedia Companion CD		Example 8.3	Examples 8.4 and 8.5	Example 8.6	Example 8.7
On Your Own	8.1	8.2–8.3	8.4–8.5		8.6–8.7
Experiments				8.1	8.2
Vocabulary	❑	❑	❑	❑	
Supplies	**We Provide:** tape, marble. **You Provide:** piece of string 25 cm long, ruler, table or counter (that can have tape put on it), books, mass (i.e., ball or nut to hang on the string), an empty paper towel cardboard tube, scissors, helper, safety glasses.				
Shopping/Planning List	**For next week:** no experiments are scheduled for next week.				
Other Notes					

Vocabulary Terms and Important Facts

The Definitions of Work and Energy

Energy—(p. 251) The ability to do work.

Work—(p. 251) The product of the displacement of an object and the component of the applied force that is parallel to the displacement.

The Mathematical Definition of Work

Work equation—(p. 252) $W = F_{\parallel} \cdot \Delta x$

Kinetic and Potential Energy

Potential energy—(p. 254) Energy that is stored, ready to do work.

Kinetic energy—(p. 254) Energy in motion.

Potential energy equation—(p. 255) $PE = mgh$

Kinetic energy equation—(p. 255) $KE = \frac{1}{2}mv^2$

The First Law of Thermodynamics

The First Law of Thermodynamics—(p. 258) Energy cannot be created or destroyed. It can only change form.

Total energy equation—(p. 259) $TE = PE + KE$

Friction, Work, and Energy

Mechanical energy—(p. 267) Energy associated with the movement (or potential movement) of objects.

Chemical energy—(p. 267) Energy associated with the chemical bonds of a molecule.

Electrical energy—(p. 267) Energy associated with the motion (or potential motion) of charged particles.

Heat—(p. 267) Energy that is transferred from one object to another as a result of a difference in temperature. ■

Week 36—Schedule
Module 16

Date:	Day 1 176	Day 2 177	Day 3 178	Day 4 179	Day 5 180
Science					
Exploring Creation with Physics	pp. 540–543	pp. 545–546 Review #1–20	Review for Test	Module 16 Test	
Exploring Creation with Physics–CD ROM	"Using Faraday's Law of Electromagnetic Induction" through "Some Final Thoughts"	Review #1–20	Review for Test	Module 16 Test	
Multimedia Companion CD					
On Your Own					
Experiments					
Vocabulary	❑				
Supplies	No experiments are scheduled for this week.				
Shopping/Planning List					
Other Notes					
You're All Done!					

Vocabulary Terms and Important Facts

Alternating Current

Alternating current—(p. 541) Electrical current that changes direction back and forth in a circuit. (AC)

Direct current—(p. 542) Electrical current that always flows in the same direction around a circuit. (DC) ■