HERE IS YOUR TEACHER'S RESOURCE KIT FOR INTEGRATED PHYSICS & CHEMISTRY

This kit includes a CD and *Black Line Masters* for:

1. Tables of Contents for Textbooks
2. Activity Answer Keys
3. Section Quizzes (18)
4. Chapter Tests (6)
5. Quiz Answer Keys
6. Chapter Test Answer Keys

You may reproduce the *Black Line Masters* as needed for your school.

Place the CD and *Black Line Masters* in a three ring notebook for safekeeping.

Make a print copy of the *Activity Answer Keys* and place the copy in a three ring notebook for student access (if you allow students to score/grade daily activities).
Note: Be sure **to exclude** the Quizzes, Tests, and Keys from the three ring notebook which is accessed by **students**; students **should not** have access to Quizzes and Tests, or associated keys, except as assigned under supervision of a teacher for the purposes of measuring achievement.

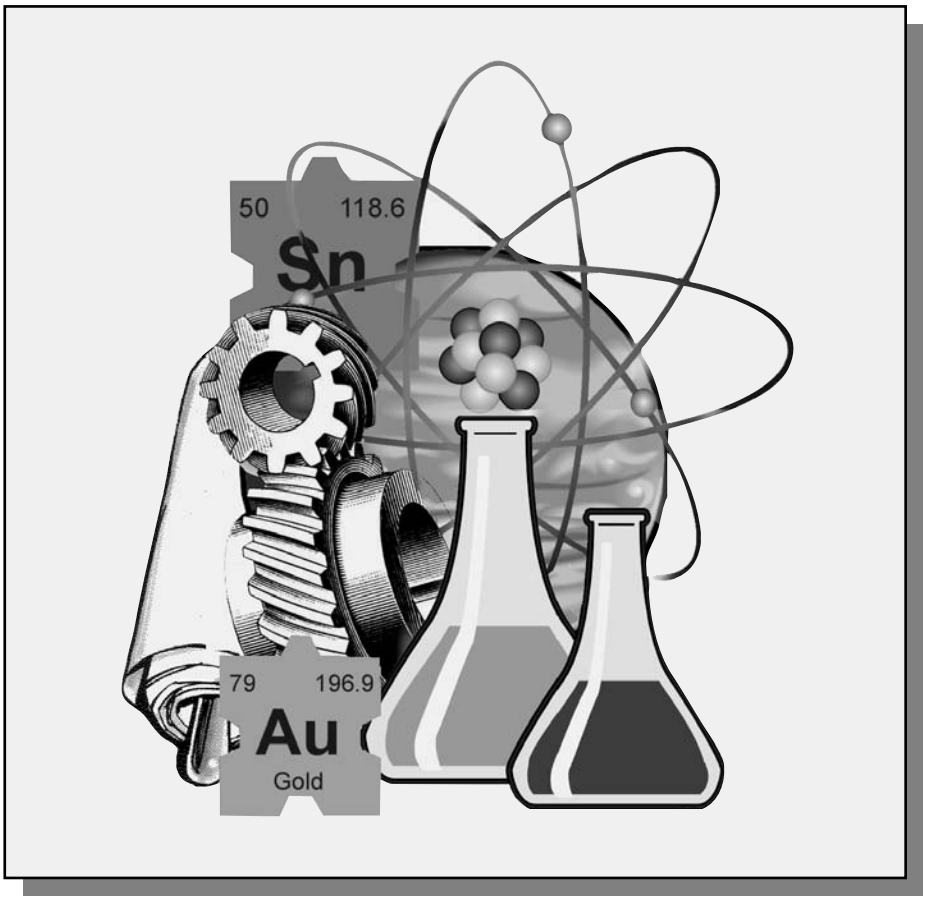
Make a print copy of the ***WHAT* AND *HOW* STUDENTS WILL LEARN FROM THIS COURSE** and give a copy to each student enrolled in the course.

PAC recommends that you use a 1½" three-ring binder with a clear plastic outer sleeve. Place the full color cover sheet inside the front slip pocket of the three ring notebook.

Cut out the spine label from the back sheet and place the spine label in the three ring notebook spine pocket.

Integrated Physics & Chemistry

TEACHER'S RESOURCE KIT



Black Line Masters

IPC 76247

Revision: 031912

PROFESSIONAL CREDITS

Integrated Physics & Chemistry

Teacher's Resource Kit

Publisher and Managing Editor
Ronald E. Johnson, Ph.D.

Writer
John Hudson Tiner

Editor
David Browder

Consulting Editors
Dortha Collins
Grant Hicks
David Riley

Production Manager
H. Michael Young

Page Composition
Randy Burch
Amy Luna
H. Michael Young

Graphic Artists

Randy Burch	Patrick Floyd	Michael Tummillo
LeAnne Butler	Lydia Johnson	Connie Watson
Roy Collins	Amy Luna	H. Michael Young
	Raeanne Stranc	

Quality Assurance
Cheryl Carithers
Nancy Johnson
Sarah Johnson
Lisa Weber
Nora Young

Integrated Physics & Chemistry

Published by
Paradigm Accelerated Curriculum
Early, Texas U.S.A.

All rights reserved.
Contact PAC, Inc. about courses in English, Math, Science, Social Studies and electives for grades 7-12. Training is available with PAC's philosophy and methodology using the *Paradigm Training Modules*. These training modules can be completed in independent study or in seminar format.

For information contact:
Paradigm Accelerated Curriculum
P.O. Box 3159 Early, Texas 76802
www.PACworks.com
learn@PACworks.com

Printed in the United States of America.
This publication is protected by copyright.

Permission must be obtained in writing from the publisher prior to any reproduction, storage in a retrieval system or transmission in any form or by any means electronic, mechanical, photocopying, recording or otherwise.

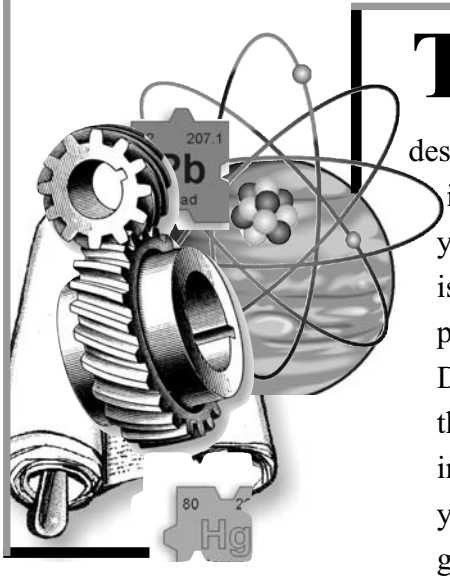
©2001-2009 Paradigm Accelerated Curriculum
Trademark:



ISBN: 1-59476-185-X
IPC: Teacher's Resource Kit

Product: 76185
This booklet is part of a full academic course, Integrated Physics & Chemistry.
This course consists of twelve textbook booklets, each one chapter long;
twelve activities booklets (one for each chapter), and a teacher resource kit (loose leaf)
consisting of quizzes, tests and keys.

Integrated Chemistry & Physics
INTRODUCTION



This course is designed to introduce you to chemistry and physics. Don't let that scare or intimidate you. You are going to enjoy this course. It appeals to science scholars and scoffers. The writer, John Tiner, is known throughout America for his excellent biographies of famous scientists like Newton, Kepler, Pasteur and Boyles.

This course is a collection of the best science writings from John Tiner. He has reduced normally complex science concepts to clearly understandable terms.

Mr. Tiner's approach is that of a master storyteller. Each lesson is presented as part of a drama that unravels a great mystery about the development of science and the periodic table of elements. All of the 180 lessons helps you understand how scientists discovered each element and how every discovery became a foundation upon which new discoveries were made. Little by little the normally complex subject of science begins to make sense and become intriguing.

This Integrated Chemistry & Physics course is designed to do two things:

1. persuade you that you really can "do science"
2. prepare you for future Chemistry and Physics courses required for graduation.

The activities and quizzes are expecially prepared to help you work through each chapter with comfort while understanding the material. Follow the instructions carefully and you will soon discover that you can enjoy learning about science.



WHAT AND *HOW* STUDENTS WILL LEARN FROM THIS COURSE

This course consists of 180 lessons in twelve chapters. The format is designed for classroom or self-study settings. Students will be able to progress through the course individually or in class groups. The secret to doing well is for students to read the entire lesson first, then complete the activity questions as they read through the text again.

Each Booklet contains one chapter. Each chapter is divided into three sections of five lessons each: (Chapter 1; Section 1; Lessons 1-5). The course is designed so students will enjoy learning science. Each lesson can usually be read in a few minutes. Students are encouraged to read each lesson completely, then respond to the activity questions which are packaged in a separate booklet labeled: *Activities*. Students may answer the questions directly on each activity page or answer the questions on a separate sheet of notebook paper. The teacher will inform students of local school policy.

Activity questions identified with an underlined number (*example:* 17.) will appear on quizzes and may appear on chapter tests. Questions on the Life Principles and vocabulary will be included in quizzes and chapter tests. When students turn in their activity questions, they may be required to quote the Life Principles to the teacher.

A section quiz is provided for students to complete at the end of every 5 lessons. The teacher will issue a chapter test after students complete all 15 lessons (after the third section quiz). The chapter test is compiled from the three quizzes. Students who fail the quiz may be required to work the lessons from that section again. Students who score 85% or higher on the three section quizzes may not be required to take the chapter test; this is at the discretion of the teacher.

Answers to activities, quizzes and tests are found in this *Teacher's Resource Kit.* The activities keys are divided by chapter and section number. Students may be allowed to grade their own answers to activity questions. The teacher will inform students of local school policy.

If the teacher requires additional comprehensive exams, questions may be compiled from the chapter tests of this course.

Vocabulary words are identified at the beginning of each lesson and are noted in bold, italics type within the text. Vocabulary words will appear on most quizzes.



Meet ***Max Potential***, PAC curriculum's mascot. Max is an adolescent wolf who will be hanging around to encourage your students to reach their maximum potential as they read and work through their lessons.


PAC
TM
TM

Teacher's Resource Kit
Table of Contents

Introduction to the Course iv
What and How You Will Learn from this Course v

Tables of Contents for Texts 1
Chapter Seven 3
Chapter Eight 5
Chapter Nine 7
Chapter Ten 9
Chapter Eleven 11
Chapter Twelve 13

Activity Answer Keys 15
Chapter Seven
Section 1 17
Section 2 19
Section 3 21
Chapter Eight
Section 1 23
Section 2 25
Section 3 27
Chapter Nine
Section 1 29
Section 2 31
Section 3 33
Chapter Ten
Section 1 35
Section 2 37
Section 3 39
Chapter Eleven
Section 1 41
Section 2 45
Section 3 47
Chapter Twelve
Section 1 49
Section 2 51
Section 3 53

Quizzes 55
Chapter Seven
Section 1 57
Section 2 61
Section 3 65

Chapter Eight
Section 1 69
Section 2 73
Section 3 77
Chapter Nine
Section 1 81
Section 2 85
Section 3 89
Chapter Ten
Section 1 93
Section 2 97
Section 3 101
Chapter Eleven
Section 1 105
Section 2 109
Section 3 113
Chapter Twelve
Section 1 117
Section 2 121
Section 3 125

Tests 129
Chapter Seven 131
Chapter Eight 135
Chapter Nine 139
Chapter Ten 143
Chapter Eleven 147
Chapter Twelve 151

Quiz Answer Keys 155
Chapter Seven
Section 1 157
Section 2 159
Section 3 161
Chapter Eight
Section 1 163
Section 2 165
Section 3 167
Chapter Nine
Section 1 169
Section 2 171
Section 3 173

Chapter Ten
Section 1 175
Section 2 177
Section 3 179
Chapter Eleven
Section 1 181
Section 2 183
Section 3 185
Chapter Twelve
Section 1 187
Section 2 189
Section 3 191

Test Answer Keys 193
Chapter Seven 195
Chapter Eight 197
Chapter Nine 199
Chapter Ten 201
Chapter Eleven 203
Chapter Twelve 205
Forms 207