

Science (6-12) Textbook Adoption 2004

Criteria for Selection:

All science teachers had the opportunity to preview, use materials and numerically rate the books based on the following criteria:

- Alignment to the VA SOL;
- Process (promoting science reasoning, skills and logic, support of inquiry, multiple areas of assessment, and measurement of all levels of thinking);
- Organization (integration of learning technologies, accurate, free of bias, promotes high expectations, logical, and reflects current science education research)

Each committee used the rating sheets they had completed after their review as well as those submitted by other science teachers to discuss the textbooks and reach consensus regarding the final selection.

Several of the textbooks were field tested during the current school year. Student feedback was taken into consideration as well as the criteria provided from the State regarding the SOL matches.

Technology Applications and Support:

Following is a brief list of the types of technology resources and applications available from the variety of textbooks selected. With these newer editions a wealth of technology resources is available to students and teachers and will help bring Science to life.

Computer microscopes	Discovery Channel Videos
Probeware labs	Test banks
Lab Activity Video Library	Web quests
SciLinks	Guided reading audio program
PowerPoint presentations	CD/Online texts available
Interactive textbooks	Videoquiz
Resource Pro CD-ROM	Navigation guides and Lesson planners

Training:

Prior to selection each of the major publishers of the texts listed on the State adoption list presented their books to the members of the committees who will in turn be a resource to other members of their staff.

August 27 – Content Staff Development Day – each of the major publishers will have representatives available to train teachers in the use of the materials. This will be one of the sessions all teachers will be required to attend that day.

Teachers who have piloted the middle school series and the high school Biology series will provide a more detailed hands-on session that day and give teachers an opportunity to put some of the materials to use.

Bruce Davidson, the science technology resource teacher has trained and will continue to train all teachers in the use of and application of the Pasco Probeware. Bruce will also present a staff development session on the August 27 staff development day.

All publishers have a toll free phone line for teachers to access as well as numerous web-site resources for assistance.

RECOMMENDED BOOKS FOR ADOPTION 2004- SCIENCE

Middle School Textbooks

Grade 6

Science Explorer Grade 6 Virginia Edition; Prentice Hall, 2004 *

Grade 7

Science Explorer Life Science Virginia Edition; Prentice Hall, 2004 *

Grade 8

Science Explorer Physical Science Virginia Edition; Prentice Hall, 2004 *

The Prentice Hall middle school series was selected by each grade level committee for the following features: technology integration, SOL alignment and strategies, logical sequence and organization, student friendly and readable, differentiation strategies, consumable student workbook, excellent teacher resources, Online textbook, specific to VA, and inquiry based.

High School Textbooks

Earth Science (Average and Honors)

Earth Science; McDougall-Littell, 2003

Recommended for reading level/reading strategies, critical thinking questions, and ancillary materials including labs, organization and strong Internet research links

AP Environmental Science

Living in the Environment; 13th Edition, Miller; Thomson, Inc. 2004

Proven track record, newer edition of currently used book with updated teacher resources

Biology (Average and Honors)

Biology, Virginia Edition; Miller, Levine; Prentice Hall, 2004 *

Selected because of its interactive features, VA SOL specific, Chesapeake Bay references, readability, and excellent teacher resources

Genetics

(on hold pending further review of materials)

Oceanography

Oceanography An Invitation to Marine Science 5th Edition; Tom Garrison
Thomson/Brooks/Cole 2005

Newer edition selected for its proven track record and student friendly text appropriate for high school

Zoology

Zoology 5th Edition; Miller and Harley; Glencoe/McGraw Hill; 2004

Selected because it represents an extensive revision of the previously adopted text and is more classroom user friendly

**denotes field tested*

Human Anatomy and Physiology

Essentials of Anatomy and Physiology 5th Edition; Seeley, Stephens and Tate; Glencoe/McGraw Hill; 2005

Appropriate rigorous text for high school course

AP Biology

Biology 6th Edition; Campbell and Reece; Prentice Hall, 2002

Proven track record, includes AP workbook, student and teacher friendly, appropriate for high school

Ecology

(on hold pending further review of materials)

Marine Biology

Introduction to Marine Biology; G. Karleskint, Jr.; Thomson/Brooks/Cole 2006

Newer edition of currently adopted text with more technology available

Physics I (Average)

Conceptual Physics; Paul G. Hewitt; Prentice Hall, 2002

Promotes scientific reasoning and logic, good organization, valid current theory, concepts based, basic math skills required

Physics I (Honors)

Holt Physics; Serway and Faughn; Holt, Rhinehart and Winston, 2002

Excellent organization, variety of questions and problem solving skills, inquiry labs, includes college level physics problems to extend the students, good examples of problems and explanations

AP Physics

Physics; Cutnell and Johnson; John Wiley and Sons, 2004

Appropriate level of problems and exercises, concise explanations, AP Physics guide provided, high level math skills emphasized, technology based labs

Chemistry (Average and Honors)

Chemistry: Matter and Change; Dingrando, et. al. ; Glencoe; 2005

Selected for its sequencing, CD/Online versions available, interactive technology resources, math handbook, excellent discovery labs built in to chapters, teacher resources, readability and appropriate math level, full solutions guide

AP Chemistry / IB Chemistry

Chemistry The Central Science 9th Edition; Brown, Lemay and Bursten 2003 Prentice Hall

Well developed problems and solutions, e-media exercises that engage students, visuals are appropriate, interactive Virtual experiments, PowerPoint presentation for each chapter, teacher resources materials, chemistry applications to life and work

**NEWPORT NEWS PUBLIC SCHOOLS
SCIENCE TEXTBOOK ADOPTION
Free with Purchase Materials lists
2004**

Middle School

Free with purchase: *per student*/ Guided Reading and Study Workbook, Va SOL test preparation Workbook, Online access to Interactive Textbook, companion Web site; *per class set*/Lab manual, interactive textbook on CD-ROM; *per teacher*/ Teacher's edition, Navigation guide and Lesson Plan, Va Teacher Resource Kit, Color Transparencies, Inquiry Skills Activity Book; Student Centered activity book, Computer Microscope lab manual, test banks, test prep materials; online access pack, student edition Audio CD, Resource Pro CD, Lab Activity Video library, Concept Video Library, Probeware lab manual with CD-ROM, Discovery Channel Videotapes (2); Computer Microscope with Lab bundle

High School Books:

Earth Science

Free with purchase— *per student*/lab manual or reading study guide, one each year of adoption; *per teacher*/class set of cut corner pupil editions, teacher's edition, VA Lesson plans and Easy Planner, Online version, teacher resource package

Physics

Free with Conceptual Physics: *per student 1st year only*/ Problem-Solving Exercises in Physics; *per teacher*/ Teacher's edition, core teacher resources, Transparency package, computer test bank CD-ROM, Concept development practice book

Free with Holt Physics: *per student*/Basic Online Edition; *per class*/teacher selects from section review worksheets, problem workbook, lab experiments, technology-based lab activities or Reading in the Content Area workbook; *per teacher*/Teacher's edition with Va Professional Support Package, Teaching resources, One stop planner CD-ROM with Test generator, Teacher's solution manual, Interactive Tutor CD-ROM, transparencies, Lesson presentations on CD-ROM, CNN Science in the News, Internet resources (SciLinks)

Anatomy

Free with purchase: *per teacher*/Lab manual, test bank CD-ROM, Essential Study Partner CD-ROM, Visual Resource Library CD-ROM

Ecology

Selection of textbook is on hold waiting for more suitable samples – (Second semester course)

Oceanography

Free with purchase: *per teacher*/Teacher edition, Instructor's Manual and Test Bank, Answers to questions, ExamView Assessment, Multimedia Manager, Transparencies

Biology

Free with purchase: *per student*/Online Access to textbook on line; *per class/set of lab manuals*, *per teacher*/Teacher's edition, Teacher iText Online Access Pack, teacher's edition lab manual, Guided Reading workbook, Teaching resources, Va Lesson Plans, Test generator, Biotechnology manual, Lab assessment, Resource Pro CD, transparencies, Discovery Channel Videos, VA Test Preparation Workbook, iText CD-ROM,

Chemistry

Free with purchase: *per student*/Online textbook; *per teacher*/teacher's edition, classroom resource box, interactive lesson plans, testmaker, VA SOL review and test prep, transparencies, Lab manual, puzzlemaker, Guided Reading Audio program, Virtual Labs; *per school*/Dinah Zike's Foldables CD-ROM, Mindjogger Videoquiz

AP Environmental

Free with purchase: *per teacher*/Instructor's manual with test bank, ExamView Assessment, Multimedia Manager, Resource Integration Guide, Transparencies, CNN Today Digitized CD-ROM

AP/IB Chem

Free with purchase: *per teacher*/Teacher's edition, Instructor Resource Manual, Solutions for Exercises, Test Item file, Test generator CD, Transparency pack, Instructor Edition to Labs

AP Biology

Free with purchase: *per student*/Web site access; *per teacher*/Image Presentation library, PowerPoint lectures on CD-ROM, Transparency pack, Test Bank, Instructor's Guide to Text and Media, Investigation Biology Lab Manual, Instructor's Editions to Labs, Preparation Guide

AP Physics

Free with purchase: *per teacher*/PASCO Annotated Instructor lab manual, Instructor's Resource CD-ROM, Instructor's guide, Solutions manual, test bank, transparencies

Zoology

Free with purchase: *per teacher*/lab manual, test bank, Essential Study Partner CD-ROM, Visual Resource Library CD-ROM, PowerPoint Slides CD-ROM

Genetics

Selection of textbook is on hold waiting for more suitable samples

Marine

Free with purchase: *per teacher*/computerized test bank, Instructor's Manual/Test Bank, Transparencies