Contents

OVERVIEW	!		1
SYLLABUS GRIDS		UNIT TEACHING PROGRAMS	
UNIT 1	3	UNIT 1	10
UNIT 2	7	UNIT 2	19
ANSWERS	AND WORKED SOLUTIO	NS	
CHAPTER 1	Materials in our world		27
CHAPTER 2	Atoms: structure and mass		30
CHAPTER 3	Electrons and the periodic table	e	36
CHAPTER 4	Metals		41
CHAPTER 5	lonic bonding		46
CHAPTER 6	Materials made of molecules		55
CHAPTER 7	Carbon		60
CHAPTER 8	Organic compounds		63
CHAPTER 9	The mole		70
CHAPTER 10	Energy changes in chemical rea	actions	81
CHAPTER 11	Fuels and introduction to stoich	niometry	84
UNIT 1 REVIE	N		92
CHAPTER 12	Intermolecular forces		95
CHAPTER 13	Chromatography		100
CHAPTER 14	Gases		107
CHAPTER 15	Properties and uses of water		117
CHAPTER 16	Aqueous solutions		128
CHAPTER 17	Acids and bases		140
CHAPTER 18	Rates of chemical reactions		148
CHAPTER 19	Catalysts		153
CHAPTER 20	Science inquiry skills in chemis	try	156
UNIT 2 REVIEW			161

ONLINE RESOURCES

The following resources are available online by entering your access code into PearsonPlaces, at www.pearsonplaces.com.au.

Access the resources from the Teacher Support section in your Passport.

AREA OF STUDY TESTS AND SOLUTIONS

PRACTICE EXAMS AND SOLUTIONS

Pearson Chemistry 11 Western Australia Teacher Resource: Overview

Pearson Chemistry 11 Western Australia Reader+ and **Pearson Chemistry 11 Western Australia Teacher Resource** provide an extensive range of resources that will support you and your students in undertaking the WACE Chemistry ATAR course. Each element included in this package is designed to help you plan for, and implement, a detailed Chemistry 11 ATAR program of teaching and learning.

The **Reader+ eBook** includes interactive activities, videos, fully worked solutions to all student book questions, mathematical skills for Chemistry ATAR and a copy of the SCSA data booklet. The teacher version of Reader+ includes all the student resources plus syllabus grids and sample teaching programs.

The **Teacher Resource** includes the syllabus grid, a sample teaching program and fully worked solutions in print and online formats, and area of study tests and practice exams in online format.

These resources will assist you in ensuring that your course addresses all the aspects of the syllabus.

Student resources

INTERACTIVE ACTIVITIES

These interactive activities typically include a short, animated clip along with an activity, which may be a drag-and-drop or multiple choice. The advantage of having animations supporting content within the student book is that they bring to life concepts that are difficult to show in static format. These concepts are then consolidated with the interactive activities that immediately follow the animation. These activities are found on Reader+.

UNTAMED SCIENCE VIDEOS

These are a collection of short videos that place Chemistry concepts in a contextual or applied situation. These videos are available on Reader+.

MATHEMATICAL SKILLS EXPECTED OF STUDENTS STUDYING THE CHEMISTRY ATAR COURSE

These are short, self-directed learning modules that cover all mathematical skills expected of students studying the Chemistry ATAR course. There are 16 modules provided, which include content such as scientific notation, significant figures, changing the subject of an equation and how to construct a line of best fit. These modules are available in both the student book and Reader+.

WORKED SOLUTIONS

These are fully worked solutions to all Worked example: Try yourself exercises, section review questions, chapter review questions and unit review questions. While the short answers are provided at the back of the student book, it is important to provide detailed worked solutions that show more detail in the problem-solving process. Fully worked solutions will provide students with further guidance on the correct reasoning behind the problem-solving and the correct way to set out their working. The fully worked solutions are available on Reader+.

SCSA DATA BOOKLET

This is reproduced by permission of the SCSA to provide a backup copy for your students to access at any time.

Teacher resources

Teacher resources include information you can use to plan, implement and assess the course. With the exception of the SCSA data booklet, these are not available to students.

SYLLABUS GRIDS

The two syllabus grids connect the syllabus dot points to the chapter and section of the student book. Each syllabus dot point, including Science understanding, Science as a human endeavour and Science inquiry skills, is shown alongside the chapter in which the content is covered or the skills are developed. The syllabus grids can be used to show the progression of the course through the student book. They also provide you with a ready reference if you need to find the chapter and section of the student book that relates to any of the dot points. These grids are available on the teacher version of Reader+ and in the print and online versions of the *Teacher Resource*.

TEACHING PROGRAMS

The two unit teaching programs provide detailed structure to the course by linking the learning outcomes and assessment options to the key concepts, syllabus dot points, student book references, question references, and worked example references. You might need to modify the programs to suit your school's timetable. The sequence of lessons follows a logical progression of the concepts and may vary from the sequence in which the syllabus dot points are presented. References in the programs to the student book include the chapter, section, student questions and worked examples to help you in the programming of your course. Suggestions for assessment tasks are also provided. Practical activities can also be sourced from other providers such as STAWA. The teaching programs are available on the teacher version of Reader+ and in the print version of the Teacher Resource. An editable version is available on the online version of the Teacher Resource.

WORKED SOLUTIONS

These are fully worked solutions to all Worked example: Try yourself exercises, section review questions, chapter review questions and unit review questions. While the short answers are provided at the back of the student book, it is important to provide worked solutions that show more detail in the problemsolving process. Fully worked solutions give students further guidance on the correct reasoning behind the problem-solving and the correct way to set out their working. The fully worked solutions are available on Reader+ and via the print and online versions of the *Teacher Resource*.

AREA OF STUDY TESTS AND SOLUTIONS

For each area of study there is a test, fully worked solutions and a marking guide provided. These can be used to construct tests for your course or used to supplement revision material available for your students. These tests are only available on the online version of the *Teacher Resource*, so are initially secured.

PRACTICE EXAMS AND SOLUTIONS

There are four practice exams with fully worked solutions and a marking guide. Two exams cover content from Unit 1 and two exams cover content from Unit 2. These can be used to construct exams for your course or used as practice exams for your students. These exams are only available on the online version of the *Teacher Resource*, so are initially secured.