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Key	
■■■	Science Inquiry Skills
■■■	Biological sciences
■■■	Chemical sciences
■■■	Physical sciences
■■■	Earth and space sciences

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Go to your **eBook** to access this **STEP UP chapter** as well as:

- Activity Book worksheets
- Answers
- Teacher support notes



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Key	
■ ■ ■	Science Inquiry Skills
■ ■ ■	Biological sciences
■ ■ ■	Chemical sciences
■ ■ ■	Physical sciences
■ ■ ■	Earth and space sciences

# How to use this book • STUDENT BOOK

**Pearson Science 2nd edition** has been updated to fully address all strands of the new **Australian Curriculum: Science** which has been adopted throughout the nation. Since some states have tailored the Australian Curriculum slightly for their own particular students, the coverage of the new **Victorian Curriculum: Science** is also captured in this new edition. We address inclusion by clearly indicating the additional content which enables flexibility to determine the approach, as well as the added bonus of an option to engage with **extension** and **revision** opportunities.

All aspects of the student books have been thoroughly reviewed by our **Literacy Consultant Dr Trish Weekes** and the result is **more accessible** content, **enhanced scaffolding** and **strengthened question and instructions sets**. The design is updated to improve the readability and navigation of the text.

In this edition, we retain a flexible approach to teaching and learning. A careful mix of **inquiry**, **STEM** and a range of **practical investigations**, along with **fully updated** content reflect the dynamic and ever-changing nature of scientific knowledge and developments. Combined with the improved and enhanced sets of questions, this series provides a rich assortment of choice, supporting a **differentiated approach**.

*An integrated and research-based approach to science education, which ensures every student has engaging, supportive and challenging opportunities.*

## Be set

The **chapter opening page** sets a context for the chapter, engaging students through questions that get them thinking about the content and concepts to come. The chapter learning outcomes are provided in student friendly language and give transparency and direction for the chapter. Each chapter is divided into self-contained modules. The **module opening page** includes an introduction that places the material to come in a meaningful context.

## Be interested

Stunning and relevant **photos and illustrations** are purposefully selected to build understanding of the text. Students know when and how they should engage with artwork as each image is clearly referenced from within the text to develop understanding. Captions for every artwork, along with labels for more difficult images, build further meaning and understanding.

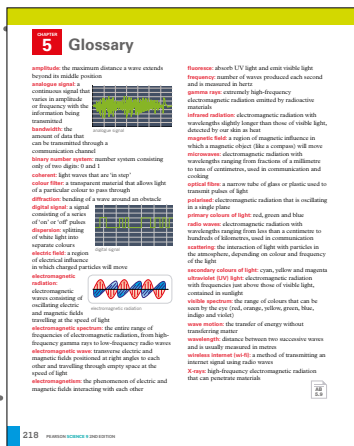




# How to use this book *continued*

## Be supported

Every chapter concludes with an illustrated **glossary** that is an easy reference for additional support in comprehension of key terms. All key terms are bolded throughout the chapter.



## Be reinforced

The **Activity Book** provides a set of worksheets for every student book chapter, giving lots of opportunities for practice, application and extension. Reference **Activity Book icons** indicate when the best time is to engage with a particular worksheet.



## Be progressed



**Lightbook Starter** contains **complementary sets of questions** for the module and chapter review sets from within the **student book**. This serves as alternate or additional assessment opportunities for students who enjoy the benefit of **instant feedback, hints** and **auto-correction** when engaging with this cutting-edge digital **formative** and **summative assessment** platform. Questions are all **tracked** against curriculum learning outcomes, making **progress** monitoring simple. A handy icon indicates the best time to engage with Lightbook Starter.

## Be prepared

Focussed on supporting the greater **diversity of learners and pathways**, a 'step-up' program has been developed to launch students into senior sciences, in addition to the 'core' science program. A series of **step up chapters**, written by experienced senior science teachers, have been developed with the view to providing all students with best chance of success.

The **Year 9 Student Book** features a step up chapter on **Psychology**. The **Year 10 Student Book** includes step up chapters for **Biology, Chemistry** and **Physics**. These chapters are referenced from the print text and are provided in full via the **eBook**. The eBook also contains **worksheets** specific to supporting the application and development of skills and knowledge from within the text.

All Year 10 Student book chapters include a new series of **Exam Style questions** to provide students practice and exposure in preparation for examinations.

## Student pathways

Pearson Science SB9 is designed to cater for a range of student abilities and prepare students for future pathways they may plan to pursue.

Pearson Science SB9		Focus of chapter	Pathway	
<b>Chapter 1</b>	Scientific inquiry skills	Curriculum science skills: a reference tool for use all year	■ ■ ■	Year 9 and all senior sciences
<b>Chapter 2</b>	Materials		■ ■ ■	Chemistry
<b>Chapter 3</b>	Reaction types		■ ■ ■	Chemistry
<b>Chapter 4</b>	Heat, sound and light		■ ■ ■	Physics
<b>Chapter 5</b>	Electromagnetic radiation		■ ■ ■	Physics
<b>Chapter 6</b>	Electricity		■ ■ ■	Physics
<b>Chapter 7</b>	Body coordination		■ ■ ■	Biology
<b>Chapter 8</b>	Disease		■ ■ ■	Biology
<b>Chapter 9</b>	Ecosystems		■ ■ ■	Biology
<b>Chapter 10</b>	Plate tectonics		■ ■ ■	Earth sciences
<b>Chapter 11</b>	Psychology step-up		■ ■ ■	Senior psychology

# SERIES COMPONENTS

## Pearson Science 2nd edition Teacher Companion

The Teacher Companion makes lesson preparation easy by combining full-colour student book pages with teaching strategies, ideas for class activities and fully worked solutions. All of the Activity Book pages are also included and are complete with model answers.



### Be prepared

The **Chapter preview** provides an overview for planning purposes, including things to be aware of and organise ahead of commencing. The **pre-prep** also has an indicator of the time allocation to complete the chapter.

### Be an expert

A further improved Teacher Companion places the support of **experts** alongside every Pearson Science 2e teachers, featuring wrap-around teaching and learning strategies and support from:

- **Literacy Consultant: Dr Trish Weekes**
- **Differentiation Consultant: Anna Bennett**
- **School laboratory technicians: Penny Lee and Donna Chapman**

### Be confident

All practical activities have been trialled, reviewed, amended and replaced as necessary to ensure teachers and students can undertake practical activities that are tested, work and will yield effective results. Suggested replacement materials and equipment provided to make science more accessible.

Full risk assessments, safety notes and technician's checklist and recipes provided. Pracs and risk assessments have been updated to reflect new regulations around safety and materials in school science classrooms.

### Be informed

Full **answers** including suggested findings and possible answers to practical activities, fully worked solutions and support for open-ended research, inquiry and STEM activities.

## Pearson Science Lightbook Starter

Lightbook Starter offers a **digital formative and summative assessment tool** with **hints, instant feedback** and **auto-correction** of responses. Students and teachers also enjoy the visibility of learning through

a **progress tracker** which shows student achievement against curriculum learning outcomes. Lightbook Starter provides questions with the most sophisticated auto-correction of answers.

### Be ready

Commence each chapter with questions to establish a baseline for each student around prior knowledge. The **'before you begin'** section includes useful preparatory material with **interactive** resources to **activate prior knowledge** and **reteach key concepts**.

### Be in control

Lightbook starter is written to enable teachers and students to use this digital assessment tool as an **alternative** (or additional practice) **to student book questions**. The Lightbook Starter structure mirrors the student book question set, thereby providing a complimentary alternative to the student book questions. This supports a fully integrated approach to digital assessment and feedback.

### Be assisted

**Module review questions** (with **hints** and **solutions**), help students **check for understanding** of learning, revise and provide useful **formative assessment** to help teachers identify areas of weakness, great for lesson planning. These serve as a touchpoint throughout the chapter and students benefit from auto-corrected responses which provide **instant feedback** and support.

### Be assessed

The **Chapter Review** in the student book has a complimentary **assessment** set in Lightbook Starter. Use this as an alternative to a class test at the end of a topic.

### Be reflective

An integrated **reflection set** supports students in considering their progress and future areas for focus.

### Be tracked

Enjoy seeing progress through the learning outcomes updated instantly in the **progress tracker**.

LightbookStarter



## Pearson Science eBook

Pearson eBook enables viewing and interaction with the student book online or offline on any device: PC or Mac, Android tablet or iPad and interactive whiteboard. This eBook retains the integrity of the printed page whilst offering easy to access resources, support and linked activities that will engage your students at school and at home.

The eBooks provide a fully integrated, digital learning platform. Enjoy the benefits of having the following digital assets and interactive resources at your fingertips:

- New interactive activities and lessons
- New Untamed Science videos
- Web destinations
- Student investigation templates and teacher support
- New STEP UP Student Book and Activity Book chapters with answers at Years 9 and 10
- Full answers to all Student Book and Activity Book questions
- SPARKlabs
- Risk assessments
- Full teaching programs and curriculum mapping audits
- Chapter tests with answers



## Pearson Science ProductLink

Additional student and teacher resources are available free when you purchase **Pearson Science 2nd Edition**. To access, visit [www.pearsonplaces.com.au](http://www.pearsonplaces.com.au) and log in. Click on 'Toolkit' then select 'ProductLink' and browse your title.

## Professional Learning, Training and Development

Did you know that Pearson also offers teachers a diverse range of training and development product-linked learning programs? We are dedicated to supporting your implementation of Pearson Science, but it doesn't stop here.

Our courses align closely with Pearson Science 2nd Edition and offer an in-depth learning experience, combining both practical and theoretical elements, enabling you to implement the resource effectively in your classroom.

Find out more about our product-linked learning, workshops, courses and conferences at **Pearson Academy** [www.pearsonacademy.com.au](http://www.pearsonacademy.com.au)