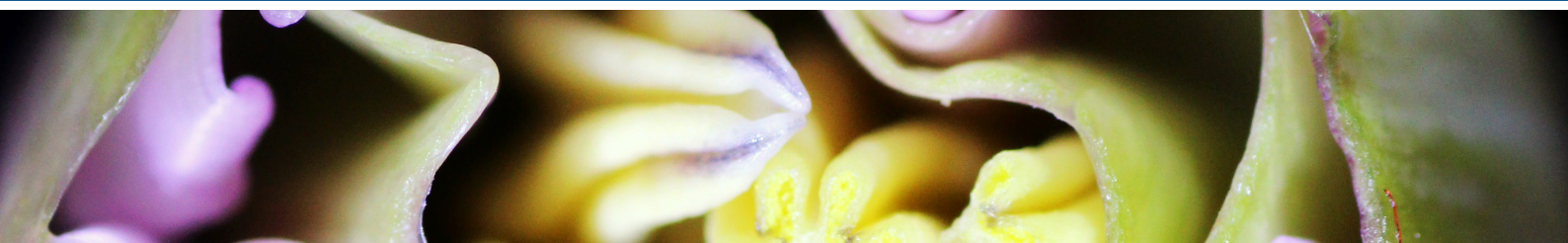




November 2021

Newsletter



Contents

- 2 Contact SASTA
- 3 From the President
- 3 SASTA Membership
- 4 Professional Learning for Term 1 2022
- 5 SASTA Awards
- 5 SASTA Honour Awards
- 6 Outstanding Preservice Educator Awards
- 6 Anthony Patten Master of Education Prize
- 7 Psychology Summer Conference
- 8 Oliphant Science Awards
- 9 2022 Annual Conference - Call for Workshops

2022 Events

Psychology Summer Conference 2022

Friday 14 January 2022, Education Development Centre

See page 7 for details.

Teachers new to teaching Stage 2 Science

- **Biology** – Friday 11 February 2022
- **Physics** – Friday 11 February 2022
- **Chemistry** – Friday 18 February 2022
- **Nutrition** – Friday 18 February 2022
- **Psychology** – Friday 25 February 2022
- **Scientific Studies** – Friday 25 February 2022

See page 4 for more details.

Explicitly teaching the literacy of science: improving literacy to improve science (year 3-8)

Friday 4 March & Thursday 24 March 2022

See page 4 for more details.

SASTA Annual Conference – Call for Presenters

28-29 April 2022, Westminster School

See page 9 for more details.



Like us on Facebook
@SASTAInc



Follow us on Twitter
@SAScience

South Australian Science Teachers Association Inc.

Association member of the Australian Science Teachers Association (ASTA)

249 Henley Beach Road, Torrensville SA 5031

P 08 8354 0006 | E office@sasta.asn.au | W www.sasta.asn.au

Supporting Teachers of Science | Advancing Science Education

Print Post Publication No. PP 100004158





249 Henley Beach Road, Torrensville SA 5031
ABN: 22 938 317 192
P: 08 8354 0006 F: 08 8354 0008
E: office@sasta.asn.au W: www.sasta.asn.au

Patron of the South Australian Science Teachers Association

Professor Caroline McMillen, Chief Scientist for SA

SASTA Board

President: Peter Beveridge
Vice President: Anita Trenwith
Treasurer: Peter Turnbull
Glen Arthur
Meegan Ballantyne
Katrina Elliott
Katie Gloede
Dina Phan
Anthea Ponte

Board Representatives

Membership & Awards

Anthea Ponte & Dina Phan
(Co-Chairs)

Oliphant Science Awards

Peter Turnbull & Anita Trenwith (Co-Chairs)

PD & Conferences

Glen Arthur & Katrina Elliott
(Co-Chairs)

Policy Development

Peter Beveridge (Chair)

SASTA Office

Executive Officer
Kate Dilger
Office Manager
Rebecca Cooke
Marketing & Communications Coordinator
Tegan McClean
Administration & Member Services Assistant
Bianca Warnock

Honorary Life Members

Doug Anders
Tony Diercks
Elma Gurney
Bob Morton AM
Ronne Page
Mike Roach
Lester Russell
Peter Schodde OAM
Jack Smith
Ray Smith
Alby Whitelaw
Dr Jane Wright

Newsletter copy deadlines 2022

(Advertising deadlines one week earlier)

Edition	Deadline
February	14 January
May	15 April
August	15 July
November	14 October

Advertising

Advertising rates & booking form available online at www.sasta.asn.au

Views expressed in this newsletter are not necessarily those of SASTA or the editors. Whilst every effort is made to be factual, no liability is accepted for the accuracy of information presented.

© 2021 SASTA. Reproduction of material contained herein is permitted provided its source is acknowledged. All contributions should be emailed to marketing@sasta.asn.au

Adhering to the following guidelines would be appreciated:

- Save as a Microsoft Word document
- Tables to be set up as text with one tab between columns and a return at the end of each row.
- For spelling please use the Macquarie Dictionary and where several alternatives are listed, use the first. The exception to this is when you are citing, referencing or quoting directly from a source which uses alternative spelling.
- Photographs should be high quality untouched digital photographs.

The cover image has been adapted from 'Isla's Hidden Worlds' from Isla Balestrin, Wilderness School as a Photography entry in the 2021 Oliphant Science Awards competition.

This view of a tulip bud from above reveals the detailed woven patterns of the petals and stamens. These patterns are not noticeable when looking at the flower from the outside.

From the President



I hope that 2021 has been another successful year for all SASTA members!

Looking back at the year, we have celebrated some important milestones together as an association. 2021

saw the 70th year celebrations for SASTA as an organisation which included a special dinner as part of the Annual Conference. Another milestone was the 40th year of the Oliphant Science Awards with some exciting changes coming from next year onwards. 2021 also saw a return to face-to-face for our professional learning offerings and growth in our online presence for regional and remote members.

The 2022 Professional Development Calendar has now been released and there are some new additions through connections SASTA has made via other associations, as well as our major events such as the SASTA Annual Conference, Early Career Teachers Conference and the STEM Conference.

SASTA has made changes to membership fees for 2022 with a reduction to all Personal Membership prices including Personal Members, 1st & 2nd year teachers and students.

Finally, I would like to thank all SASTA members personally. This being my first year as President of SASTA has been incredibly exciting and fulfilling. I have had the opportunity to represent Science Teachers via Educators SA events such as the World Teacher's Day Awards Gala and marketing initiatives which can be found on their social media accounts. I have connected with other association presidents to share in knowledge and experience whilst learning about how to advocate for our profession in the wider community.

I look forward to a successful 2022 and wish you all well over the holiday season.

**Best wishes,
Pete Beveridge**

2022 SASTA Membership

It's that time of year already and 2022 SASTA membership is now open for renewal! Personal Membership prices have all been reduced - Personal Members are now \$95 and there is great pricing for 1st & 2nd year teachers and student members. **Check the website for full details.**

You can renew your membership subscription on the SASTA website: <https://www.sasta.asn.au/renew/form>.

To help you plan for 2022, we have put together a professional learning calendar for next year which is available here: https://www.sasta.asn.au/professional_learning.

Don't forget, your membership will expire on 31 December 2021, so if you want to register for any 2022 professional learning after this date, your 2022 membership will need to be paid before you register to be eligible for the member price.

Thank you for your support of SASTA in 2021, we look forward to working with you next year!

New Staff Member

Dr Bianca Warnock, Administration and Member Services Assistant

We would like to welcome Bianca to the SASTA team! With a background in plant biotechnology, and a passion for science communications, Bianca brings skills of working in STEM academia, school outreach and event management to the SASTA team. You may have come across Bianca's work in the past with the University of Adelaide former Why Waite program. Now Bianca is the director of Sciren, a science translation company designed to translate the science of the everyday world through hands on activities and workshops. (Learn more at sciren.com.au) Bianca has also volunteered her time on several SASTA member subcommittees, since 2020.

Professional Learning for Term 1 2022

Teachers new to teaching Stage 2 Science

Education Development Centre, Hindmarsh
9.00 am – 3.00 pm

Some of the key topics covered in these workshops include: an overview of the course, planning and assessment, sample tasks and discussion and moderation.

Participants will be given the opportunity to share and discuss ideas, tasks and other resources for teaching the new course.

Biology

Friday 11 February

Presented by Kathy Adams
(Horizon Christian School)

Physics

Friday 11 February

Presented by Michael Smith
(Concordia College)

Chemistry

Friday 18 February

Presented by Glen Arthur

Nutrition

Friday 18 February

Presented by Elizabeth Arthur
(Nazareth Catholic College)

Psychology

Friday 25 February

Presented by Carolyn Pinchbeck
(Xavier College)

Scientific Studies

Friday 25 February

Presenter TBC

Improving Science Literacy

Friday 4 March & Thursday 24 March 2022
Education Development Centre, Hindmarsh
9.00 am – 3.30 pm

Presented by Tony Hole, Catholic Education
South Australia

Explicitly teaching the literacy of science: improving literacy to improve science

There are significant differences in the ways Learning Areas use literacy: differences in the types of written texts that students read, speak and write; differences in the ways those texts are structured; and differences in the kind of language features and vocabulary that students are required to know and use.

One aim of teaching Science is that students are able to communicate scientific understanding and findings to a range of audiences. (Australian Curriculum: Science) Through learning to read, speak and write science texts, students build and deepen their scientific understanding.

This course develops participants' capacity to explicitly teach the specific literacy of science at the same time as teaching the science content.

In this course, participants will learn to:

- apply and design teaching and learning strategies that scaffold students' development and control of science literacy
- provide explicit feedback to students on their writing in science
- implement reading strategies: before during and/or after reading to draw attention to the language and structure of the text- how it is working to build science knowledge and understandings.

The course is structured over two days.

Intended audience: science teachers for years 3-8

Registration fees

Personal Member	\$145
SASTA Student Member	\$50
Corporate Member (SA School)	\$185
Non Member	\$225

Morning tea and lunch provided.

For more information and to register, go to sasta.asn.au/professional_learning

2022 SASTA Awards

There are many great teachers out there that SASTA would like to acknowledge, but often they do not get nominated for Awards because teaching is a very busy job and people do not get the time to fill in nomination forms. Start thinking now! There are a number of Awards for SASTA members.

SASTA Medal

SASTA offers its members an award for excellent contribution to science education or teaching or both. The SASTA Medal is awarded to an individual who has made a significant contribution to SASTA and has been active in science education.

Credit Union SA / SASTA Outstanding Contribution to the Teaching of Science Awards

The Outstanding Contribution to the Teaching of Science Awards recognise teachers' contributions to the education of students in science.

Helen Castle Memorial Scholarship

This scholarship is in memory of Helen Castle, a dedicated and enthusiastic science teacher who tragically died during the Eyre Peninsula bush fires in 2005. The scholarship is designed to assist country science teachers attend the SASTA Annual Conference and gain professional development to assist themselves and other country teachers to maintain a high standard of science teaching in country areas. Two (2) scholarships of \$500 will be awarded to enable country-based science teachers to attend the SASTA Annual Conference, 28-29 April 2022.

Nominations close Friday 4 March 2022 at 4.00pm. Online nominations can be completed at www.sasta.asn.au/about_us/awards.

2021 Honour Awards

Congratulations to Glen Arthur and Katrina Elliott, who were presented with SASTA Honour Awards at the Educators SA World Teachers Day celebration on Friday 29 October!

The SASTA Honour Awards were first introduced in 2007 and are designed to recognise a SASTA member's contribution to SASTA. It is the second highest honour awarded by SASTA. The areas could relate to the functions of the Board, one of the subcommittees or reference groups or representing SASTA.

Katrina joined SASTA as a young science teacher and has been a contributor to all aspects of the association for over 30 years. Most significantly, Katrina first joined the SASTA board in 2005 and has been a board member for a total of 14 years. Katrina has also been a member of the SASTA PD committee from 2009 - until present and has planned and presented at many SASTA conferences and CONASTA conferences, delivering over 30 presentations since 2011.

Glen is a very valued member of SASTA and has given incredible service over many years. He has 25 years of involvement with science education and has been directly involved in all aspects of SASTA PD, developing and sharing resources, editing the SASTA Study Guide and running workshops. Glen has shared this expertise with SASTA members and has endeavoured to mentor many teachers of all career stages.



Outstanding Preservice Educator Awards

Kate Dilger, SASTA Executive Officer, recently attended two award ceremonies to present SASTA awards to outstanding preservice teachers. Award recipients receive a complementary SASTA membership and free registration to the Early Career Teachers Conference.

16 September | University of South Australia

2020 SASTA Prize | Outstanding Pre-service Educator: Undergraduate

- Brooke Webb

2020 SASTA Prize | Outstanding Pre-service Educator: Postgraduate

- Katie Sandow



4 November | The University of Adelaide

2021 SASTA Prize | Outstanding Pre-service: Biology curriculum and methodology

- Anna Karaganova (*top left*)

2021 SASTA Prize | Outstanding Pre-service: Chemistry curriculum and methodology

- Jamie William Humphrys (*top right*)

2021 SASTA Prize | Outstanding Pre-service: Physics curriculum and methodology

- Lachlan Michael Loader (*middle left*)

2021 SASTA Prize | Outstanding Pre-service: Psychology curriculum and methodology

- Adriana Positano (*middle right*)

2021 SASTA Prize | Outstanding Pre-service: Science curriculum and methodology

- Masha Suarezva (*bottom left*)

2021 SASTA Prize | Outstanding Pre-service: Scientific studies (STEM) curriculum and methodology

- Jaclyn Steffan (*bottom right*)



Anthony Patten Master of Education Prize

Glen Arthur was recently awarded the Anthony Patten Master of Education Prize from the University of Adelaide, for achieving the highest graded thesis and GPA of the cohort, during completion of his Master of Education in education research. His thesis focussed on the development of a novel tool for teachers to achieve Transfer of Learning in the construction of assessment.

Glen said: "It has been a huge commitment on top of all other commitments, while it has been hugely rewarding. It was a huge honour; the story of Anthony Patten and his family resonated with me. It recognises that all teachers are researchers in their own right and that research can provide tangible tools for the classroom that really make a difference to student outcomes. I could not have done it without the support and encouragement of my family and supervisor."

Glen has been encouraged to pursue a PhD, building from the unique nature of this work.



Psychology Teachers Summer Conference 2022

Friday 14 January 2022, Education Development Centre

Helping our students to THRIVE: *Transferring our Learning from Stage 1 to Stage 2*

9:00 am	Welcome	Carolyn Pinchbeck & Nicole Marinos
9:15 am	Keynote Address: Forensic Psychology: from the real world into the classroom Dr Jacqueline Condon, <i>Forensic Psychiatrist & Mental Health Emergency Specialist</i>	
10:15 am	Morning Tea	
10:30 am	SACE Examination and Moderation Review	Supervising Panel Representatives
11:00 am	NEW! Stage 2 Essentials Education Psychology Workbook overview	Kirsty Gebert & Deb Green, Workbook authors
12:00 pm	Concurrent Workshops Session 1	
	1.1 SHE & DandD Discussing LIVE student work samples and task sheets (what we learned from stage 1, and are now implementing in stage 2)	Stephanie Sunter, Golden Grove High School
	1.2 Whats new in 2022 (year 12) and Preparing students for the new Exam Format	Emma Beukema, St Mary's College
	1.3 Organisational Psychology - CLASSROOM ACTIVITY IDEAS!	Dr Neil Kirby, The University of Adelaide
1:00 pm	Lunch	
1:30 pm	Concurrent Workshops Session 2	
	2.1 SHE & DandD Discussing LIVE student work samples and task sheets (what we learned from stage 1, and are now implementing in stage 2)	Stephanie Sunter, Golden Grove High School
	2.2 Cyber Psychology (year 11)	Innika Ackerley, Endeavour College
	2.3 Organisational Psychology (year 12) - handing it to you on a silver platter! PPT's, activities and resources you can walk into your classroom and start teaching with!	Candice Byrne, Pembroke School
2:30 pm	Concurrent Workshops Session 3	
	3.1 Whats new in 2022 (year 12) and Preparing students for the new Exam Format	Emma Beukema, St Mary's College
	3.2 Organisational Psychology (year 12) - handing it to you on a silver platter! PPT's, activities and resources you can walk into your classroom and start teaching with!	Candice Byrne, Pembroke School
	3.3 Cyber Psychology (year 11)	Innika Ackerley, Endeavour College
3:30 pm	Conference Plenary	Carolyn Pinchbeck & Nicole Marinos

Full program and registration at www.sasta.asn.au/professional_learning



Oliphant Science Awards

Congratulations to all prize winners in this year's Oliphant Science Awards. A list of winning and highly commended entries is available at oliphantscienceawards.com.au. Thank you to all entrants, coordinators and teachers, and also the judges

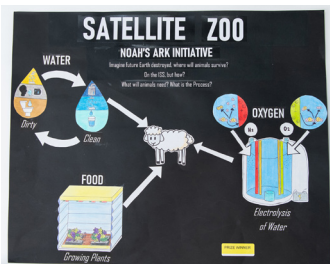
(who all agree that the standard of entries improves every year), volunteers and SASTA staff who all help to make the Oliphant Science Awards the amazing event that it is. In 2021 there were 2,292 registered entries across 9 categories and 6 age groups and 3,096 students from 106 schools involved in this year's competition.

The 2021 Oliphant Trophy Winner was Eugene Lee from Pedare Christian College for his Models & Inventions entry: The Power in Bacteria: The Microbial Fuel Cells.

The Virtual Open Day is available again this year on the Oliphant Science Awards website to showcase and celebrate the enormous effort students put into their projects and provide inspiration for future entries! You will find photos, videos and reports for all the winning entries.

We're very excited to partner with Science Alive! for our Open Day event in 2022! Models & Inventions entries and winning entries from all other categories will be on display from Friday 5 August - Sunday 7 August 2022 at the Adelaide Showgrounds. This means there have been changes to the key dates for next year's competition. Find out all the details in the 2022 Information Booklet.

Find out about the 2022 competition at oliphantscienceawards.com.au



Thank you to our major sponsors



2022 SASTA Annual Conference

Call for Workshop Presenters

28 - 29 April 2022, Westminster School

SHARE your good ideas ... submit a workshop proposal for the conference!

Presenting workshops for your colleagues is an excellent way to share best practice and develop a community of educators across the State.

TAKE PART in a broad program of professional learning workshops for primary and secondary teachers, including laboratory and computer workshops, hands-on activities, seminars and discussions.

GAIN valuable experience in leading learning that will enrich your own professional standards.

The Conference will address a range of the content and pedagogies of the Australian Curriculum: Science.

Possible Workshop Themes:

- New science initiatives
- Use of technologies in teaching science
- Science and literacy
- Innovative teaching practices
- Connections with science industry
- Sustainable environmental practices

Submit a workshop for the 2022 SASTA Annual Conference at www.sasta.asn.au by Monday 7 February 2022.

BIOLOGY: LEVELS OF LIFE

Brian LeCornu and Tony Diercks

\$29.95

Biology: Levels of Life - Australian Curriculum Edition Textbook (\$63.95)

This textbook provides detailed coverage of all the content (Science Understanding) of the SACE Stage 2 Biology subject. The new content is relevant, up-to-date and addresses Science as a Human Endeavour, with many examples throughout. The textbook is divided into four topics, with each topic presented in chapters designed to make the material easy to follow, with study questions at the end of each chapter. **A complimentary 15 month subscription to the e-book is available with every hard copy purchased.**

NEW for 2022

The Biology: Levels of Life Textbook is now available as an e-book!

For full details visit the SASTA website.

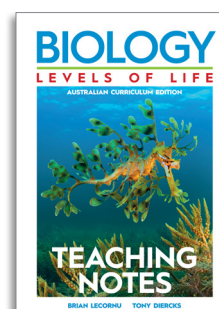
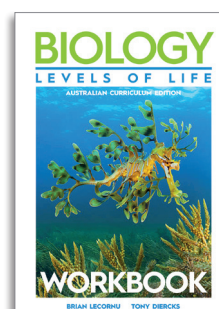
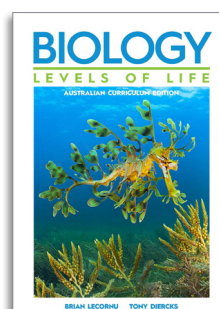


Biology: Levels of Life - Australian Curriculum Edition Workbook (\$24.40)

Written specifically to complement the textbook, this workbook covers all Science Understandings of the Biology subject outline. It can be used in conjunction with the textbook or on its own as an aid for understanding and revision. By completing answers to the workbook questions, students will develop their knowledge and understanding of biological principles and concepts.

Biology: Levels of Life - Teaching Notes (\$120.00)

Teachers will find the Teaching Notes invaluable in ensuring that all Science Understandings are covered for each of the four topics. There are teaching tips throughout as well as additional information. Answers to questions in the Workbook will assist teachers in explaining concepts to students.





School incursion & OSHC program

WE TRANSLATE THE SCIENCE OF THE EVERYDAY WORLD
USING ENGAGING ACTIVITIES & CRAFT

PRICES START AT \$10 PER STUDENT
DNA EXTRACTIONS/ BIOPLASTICS
SUSTAINABLE ART/ SHE TASK AND MORE

imagine yourself in science

sciren.com.au



Living Science: Biology

Teachers will find these textbooks an invaluable resource for planning and developing student knowledge as it has comprehensive coverage of the science understandings of the Stage 1 & 2 courses. Students will find it a great resource to complement lessons and will develop a broader knowledge of Biology across many different contexts.

'Did you know?' breakout boxes throughout the text include related stories, concepts, perspectives and facts to help engage students in deeper learning.

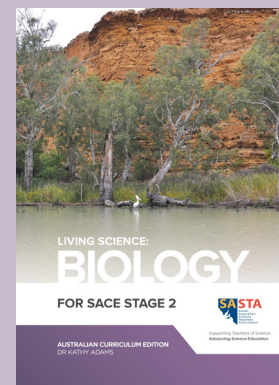
'SHE Alert' boxes are connected to the four SHE Key concepts: Communication and Collaboration, Development, Influence, and Application and Limitation.

These sections give students and teachers opportunities to consider how science and society interact to find solutions and overcome problems.

There are review questions throughout the books and at the end of each chapter. The Stage 1 textbook also has a list of possible Deconstruct and Design ideas at the end of each chapter, which could be used by the teacher to develop tasks. **Solutions are now available for both textbooks.**



\$49.00 each



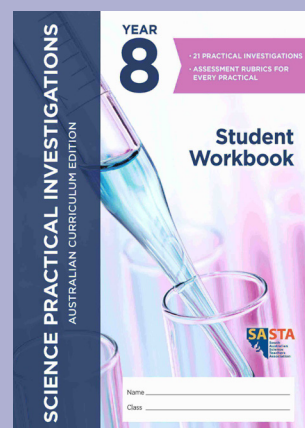
\$54.00 each

STUDENT WORKBOOKS



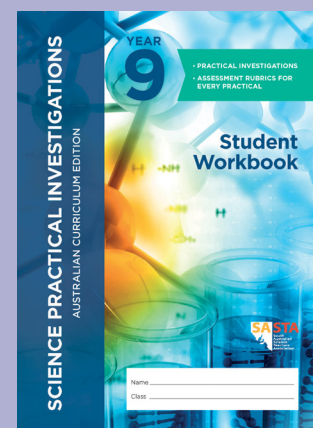
These write-in workbooks guide students through practical investigations, encouraging them to practice and enhance their inquiry skills, design procedures and answer questions about their learning.

- Explores Biological sciences, Chemical sciences, Earth and Space sciences and Physical sciences for the Year 8 or 9 Australian Curriculum
- Explanations of how to work scientifically, including manipulating variables, graphing and measurement
- Emphasis on science inquiry skills
- Assessment rubrics for each practical
- These workbooks reflect the current emphasis on STEM skills through the inclusion of Engineering Design Challenges



\$18.50 each

minimum order 20 copies



RESEARCH PROJECT WORKBOOK & GUIDE FOR SACE STAGE 2

This step-by-step workbook guides students through the three parts of the Research Project: the Folio, the Research Outcome, and the Evaluation/Review.

Students are guided through activities and supported with information to enable them to: generate an idea; develop a research question; plan, conduct and analyse research; and then structure a research outcome and an evaluation or review with a focus on achievement of the performance standards (at a high level).

Along with activities and information, the workbook also includes sections that enable students to organise and store hard copy project material.



\$39.00 each

Available from sasta.asn.au

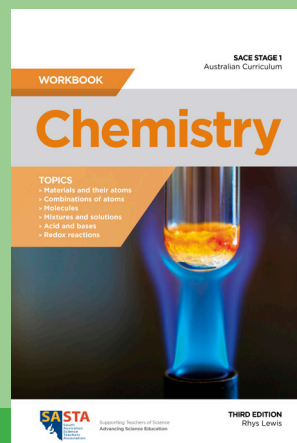
ALL NEW

Physics available
now! Biology
& Chemistry
available for
pre-order

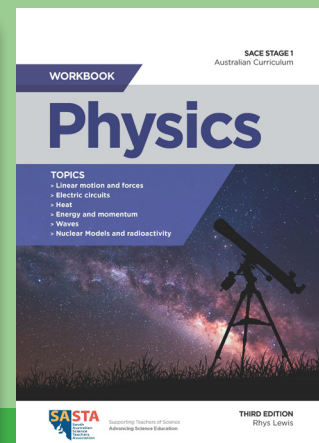
\$59.00 each



Available now



Available Dec 2021
Pre-orders open



Available Feb 2022
Pre-orders open

The Third Edition of the popular SASTA Stage 1 Workbooks set students on the path to success in their study of science through their clear and engaging narrative, innovative use of art and photos, and superior contextual questions that enhance teaching and learning.

The workbooks provide an unmatched comprehensive text fully mapped to the Stage 1 Biology, Chemistry and Physics courses in South Australia.

- highly organised text that emphasises essential concepts while keeping students **engaged** with learning outcomes.
- concise, accessible, and engaging with a clear emphasis on developing the reader's

ability to **apply their knowledge** in new and familiar contexts rather than simply recalling it.

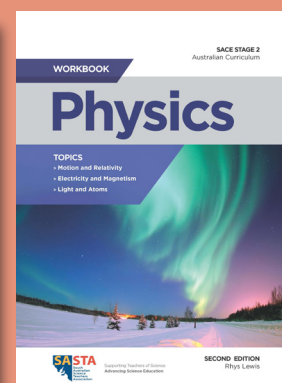
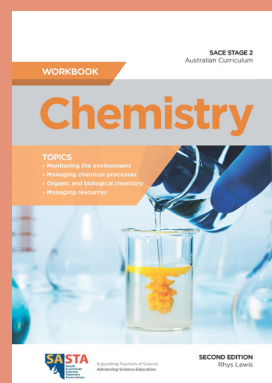
- develops **critical thinking, problem-solving** skills, comprehensive factual knowledge.
- **new Chapter Questions** incorporating Science Understanding, Science Inquiry Skills and **Science as a Human Endeavour (SHE)**.
- **new Review Tests**.
- comprehensive set of **solutions** to all Chapter Questions and Review Tests.
- hundreds of **new illustrations** that engage students while simplifying complex concepts.

The Stage 2 second edition workbooks feature revised descriptions, explanations, and illustrations of the course content along with hundreds of fully worked examples and practice questions to take student understanding to a new level.

Each book features four topic tests that have been revised to assess concepts related to Science as a Human Endeavour.

Each workbook contains fully worked solutions for all questions and topic tests.

Our workbooks support students in developing proficient and long-lasting problem-solving skills, a deeper understanding of the concepts, and a broader picture of the relevance of these topics to the world around them.



\$59.00 each

Available from sasta.asn.au