



Conferences/Events

Term 3 PD/conferences and exam prep seminars are now published. Please see pages 7, 8 & 12 for details or visit www.sasta.asn.au

Oliphant Science Awards

For the latest information concerning, judging, Open Day (including science demonstrations and come and try activities) and other key dates, please see page 4 or visit our new website at www.oliphantscienceawards.com.au

SASTA Trial Exams

Orders for biology, chemistry, nutrition, physics and psychology trial exams can now be placed online at www.sasta.asn.au or faxed to the SASTA office on 8354 0008. Please include purchase order number.



Latest Events

For the latest events and Conference information go to SASTA's website: www.sasta.asn.au

Find us on Facebook & Twitter
@ SA Science Teachers Association

Contents

Page	
2	SASTA Contacts
3	President's Report
3	SASTA Early Career Teachers Conference
4	The Oliphant Science Awards this year!
7	Term 3 Teacher Professional Learning Science
8	Money Smart
8	SASTA In-School Workshops now available!
9	Call for Workshop Presenters MASA – SASTA Conference
9	Call for Annual Conference Convenors
9	SASTA Awards
11	SASTA Early Career Science Teacher Conference October 10th 2014 Immanuel College

Early Career Teachers Conference

Friday 10 October

Venue: Immanuel College, Morphett Rd, Novar Gardens
See page 11 for program and check the SASTA website for updates.

www.sasta.asn.au



SASTA is on Facebook go to www.sasta.asn.au



SASTA is on Twitter go to www.sasta.asn.au

South Australian Science Teachers Association Inc.

Patron: Dr Barbara Hardy AO ABN 22 938 317 192
Registered by Australia Post – Print Post Publication No. PP 100004158
Member of Australian Science Teachers Association (ASTA)

Supporting teachers of science • Advancing science education



2014 SASTA Committee

Patron of the South Australian Science Teachers Association

Dr Barbara Hardy AO

SASTA Board

Karen Palumbo (President)
Mark Divito (Vice President)
John Glistak (Treasurer)
Peter Donnelly
Karen Palumbo
Jeremy LeCornu
Peter Turnbull

Board Representatives

Awards

Chris Jordison

CONASTA 63

Peter Turnbull

PD & Conferences

Peter Donnelly

Journal

John Glistak

Membership

Mark Divito

Oliphant Science Awards

Peter Turnbull

ASTA Councillors

Mark Divito
Karen Palumbo

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

SASTA Office

Executive Officer:
Greg Cole

Office Manager:
Rebecca van Schuilenburg

Project Officer:
Kate Dilger

249 Henley Beach Road
Torrensville SA 5031
Phone: 08 8354 0006
Fax: 08 8354 0008
Email: office@sasta.asn.au
URL: www.sasta.asn.au

Newsletter copy deadlines 2014

(Advertising deadlines one week earlier)

Edition	Deadline
February	20 January
May	22 April
August	21 July
November	20 October

Advertising

Advertising rates & booking form 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.

© 2014 SASTA. Reproduction of material contained herein is permitted provided its source is acknowledged. All contributions should be emailed to eo@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 alternative spellings 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.

From the President



I recently attended CONASTA 63 at Adelaide University which was a huge success attracting over 500 delegates from across Australia. I had the opportunity to hear the insights of our keynote speakers who sit at the contemporary forefront of their respective disciplines including Professor Bob Hill, Professor Tanya Monro, Professor Joe Shapter and Professor

Chris Daniels. With our interstate and international visitors we shared a few of the world class science education and research facilities Adelaide has established including Adelaide University multimillion dollar wind tunnel, RiAus, Forensics SA, Art Lab and more. This infrastructure will enable South Australia to be a hub of innovation within the international knowledge economy. Most importantly, the conference brought together a diverse field of scientific educators and provided the opportunity to collaborate, share, reflect and improve on our pedagogical practices for the betterment of the profession we are all so passionate about.

At the CONASTA Stanhope Oration a number of awards were presented including the highly prestigious SASTA Metal. This year the SASTA Metal was awarded to Ian Maynard who has made a significant contribution to SASTA over a period of more than eight years and has been actively involved in science education for more than 40 years.

Ian was SASTA Treasurer since 2007 and it has been his commitment to SASTA and his high level of personal skills that have contributed to the Associations overall financial success. He has been a driving force behind the national program Aboriginal Summer School for Excellence in Technology and Science (ASSETS), has been member of the National Science Week Committee for the past decade, ran the eLearning Maths and

Science in Industry (MSI) project with DECD and most recently, he has assisted teachers in embracing the Australian Curriculum and the Teaching for Effective Learning (TfEL) Framework. Originally a volunteer explainer at the Investigator Science Centre, Ian mentored many young science communicators, pioneered the introduction of a raft of new science education initiatives and was extremely well respected by all staff and Board members.

SASTA and the CONASTA Organizing Committee collaborated with ASTA to help deliver a most successful CONASTA event that I am sure will be well remembered by our delegates for a long time to come. I would like to thank all CONASTA organisers for your very generous and long term commitments to this 3 year project.

Karen Palumbo
SASTA President



Former SASTA Treasurer, Ian Maynard, was presented with the prestigious SASTA Medal by Patron Dr Barbara Hardy AO prior to the Stanhope Oration at CONASTA 63. (L-R) Dr Barbara Hardy AO, Ian Maynard and SASTA President Karen Palumbo

SASTA Early Career Teachers Conference

Friday, 10th October, 9.00am-4.00pm, Immanuel College

Are you new to teaching Science or in the first 5 years of your career?

If so then this conference is a great opportunity for you to be involved in **interactive and fun learning activities** as well as **gather resources** that will enrich and inform your science teaching.

The Program includes specialized workshops for **both Primary and Secondary Teachers**

Five main sessions will run throughout the day each with a different focus:

- **The Australian Curriculum: Science**
- **Engaging with Pedagogy**
- **Creative Classroom Strategies**

- **Content Knowledge and Understanding**
- **Resources to Enhance Learning**

This hands-on interactive professional learning day will cater specifically for each level of schooling. Workshops will be offered concurrently at each session so participants can choose to attend those that are most relevant to their area of teaching.

Morning Tea and lunch will be provided and there will also be a chance to network with other teachers and the presenters at the **HAPPY HOUR!!!**

National Professional Standards for Teachers:

Teachers will receive a certificate of attendance that details the hours of professional learning and the Standards covered: 2.1, 2.2, 3.2, 6.2, 7.4. See full program page 11.

The Oliphant Science Awards this year!

This year the Oliphant Science Awards has seen some changes, with the release of a new dedicated website for the Awards – www.oliphantscienceawards.com.au

The screenshot shows the homepage of the Oliphant Science Awards website. At the top, there is a navigation bar with links for Home, Contact Us, and Coordinator Login. Below this is a main header with the SASTA OLIPHANT logo and a menu with links for About, Event Info, Participant Info, Get Involved, and Register. The main content area features a large banner with the text "Great Opportunities for learning through SCIENCE" and an image of children in a science lab. To the right of the banner is a section titled "Upcoming Key Dates" with three entries: JUL 25 (Off-site projects delivery due date), AUG 09 (Computer Programming Judging), and AUG 22 (On-site projects delivery due date). Below the banner are three columns of information: "Register as a coordinator" (with a description of the awards and a "Register online" link), "Student information" (with a description of the competition and a "Find out more" link), and "Judge registrations extended" (with a description of the judging process and a "Register online" link). At the bottom, there is a section for "Our Major Sponsors" with logos for the Government of South Australia, SA Water, and The Advertiser.

Project and School Coordinator Registrations are now closed for the 2014 competition, after a huge response from almost 100 South Australian Schools, registering almost 2200 projects!

With such a large number of projects registered we are still looking for Judges to assist us in the Models & Inventions, Photography and Poster categories in the R-8 year levels. Judging of these categories will take place this year at the Thebarton Community Centre (60-78 South Road, Thebarton) on Saturday 23rd August from 9am – 1pm (lunch provided).

All Judges will receive a Professional Development Certificate, as well as a chance to network with teachers from around SA and an opportunity to see a huge selection of student work to help you gain ideas for your classroom!

To register as a judge for this year's event head to http://www.oliphantscienceawards.com.au/get_involved/judging

Reminder of Key Dates for Coordinators

Monday 21 - Friday 25 July – Delivery Week for Games, Multimedia, Science Writing & Scientific Inquiry entries at SASTA Office (Only between 9am-4:45pm). Unfortunately no late entries will be accepted, as our judges have limited time this year to review all projects.

Saturday 9 August - Computer Programming & Robotics Judging Day (time by appointment only) – Coordinators please make sure that your students are aware that they need to call to make a time as appointment times are limited!

Friday 22 August - Crystal Investigation, Models & Inventions, Photography & Poster entries to be delivered to Thebarton Community Centre (60-78 South Road, Thebarton) between 9am – 5pm

Monday 25 August - Non-winning entries to be collected from Thebarton Community Centre (9am-5pm) – coordinators please ensure that you contact SASTA if you are going to send a courier to collect your projects, as SASTA will dispose of any uncollected projects after 5pm!



Open Day 2014

Come to see, learn and immerse the whole family in science this year at South Australian's largest student science Competition – The Oliphant Science Awards Open Day!

This FREE event is open to the general public this year on Sunday 24th August from 12 - 4pm at the Thebarton Community Centre (60-78 South Road, Thebarton).

All the 2014 Oliphant Science Awards prize winning projects will be on display, as well as come and try science activities, a selection of food to purchase and engaging science shows on our main stage to watch the fun and magic of science in action! Invite your family, friends, colleagues and students to attend this event!

Science shows throughout the day will include;
SciWorld's Science Spectacular and Liquid Nitrogen Display
UniSA's Critical Thinking Magic Show
Flinders University Palaeontology Bones Box Talk
CSIRO Labs on Legs Presentation
Nature Education Centre Animal Show

Full program and more information will be available soon at – www.oliphantscienceawards.com.au



3 or 4 days of **Science Activities** for students in years 9 & 10

THE CONOCO PHILLIPS SCIENCE EXPERIENCE



ENJOY

3 or 4 days in which you will be introduced to some of the wonders of science and technology

PERFORM

interesting experiments in a university laboratory

HEAR

leaders in science, technology and engineering



LEARN

about careers in science and technology



LOCATED at 35 campuses nationally

COST is \$115 (inc GST) for 3 days and \$150 for 4 days

PROGRAMS are non-selective

SPONSORSHIP may be available through Rotary or the National Office

DATES see website www.scienceexperience.com.au

Further information and application forms are available from The ConocoPhillips Science Experience website.

www.scienceexperience.com.au

Early application is advised as we have only limited places available in all programs

The ConocoPhillips Science Experience

PO Box 514 BAYSWATER VIC 3153 Ph: 03 8288 1001



Term 3 Teacher Professional Learning Science

Focus on Science Inquiry Skills!

In Term 3 2014, SASTA Professional Learning for Science Teachers will focus on the Science Inquiry Skills of the Australian Curriculum.

At all levels of science teaching and learning, the Science Inquiry Skills detail **what students are expected to be able to do**; to pose questions, make decisions, design plans and experiments, discuss, collaborate, communicate results and provide justified answers and explanations when engaged in the inquiry process.

Specific teaching competences are required to guide students and to create opportunities by which students can gather and interrogate evidence and information.

The Workshops

The workshops provided through SASTA will explore what the inquiry process looks like in a science classroom and **provide practical strategies and resources to support teachers** in promoting this way of learning.

BOOK NOW at: <http://www.sasta.asn.au>

For Primary Years Teachers:

1. Year 7 Science Series: Physical Sciences

Date: Monday 1st September

This workshop will support teachers to further develop their current understanding of the Science Understanding Strand: Physical Sciences

The workshop aims to build teacher knowledge and conceptual understandings while participants are actively engaged in science investigations using the Science Inquiry Skills. The workshop will use an inquiry approach to the learning of science, providing teachers with the confidence and resources to implement the requirements of the Australian Curriculum in their classrooms.

Who should attend: Year 6/7 teachers or specialist science teachers

2. Investigations in Primary Science

Date: Monday 8th September

Children need opportunities to develop practical and inquiry skills in order to engage with the world in a scientific way and to make sense of what they are learning.

This workshop will look at science investigations in action. Teachers will be led through the elements of a scientific investigation, develop an understanding of how to use an investigation planner and have access to a range of ready to use resources.

Who should attend: Years 3-7 teachers



For Primary Years Teachers:

3. Science in the Early Years

Date: Friday 19th September

Science is a broad and exciting subject especially for young children, who are naturally curious and have questioning minds. In this workshop teachers will explore the importance of preparing the classroom environment for science exploration, focusing children's observations, and providing time to talk about what was done and seen.

Teachers will be involved in simple investigations that will allow children to question, explore, investigate, make meaning, and construct explanations and organize knowledge by manipulating materials.

Who should attend: Primary Years teachers

For Secondary/Middle school teachers:

1. Investigating Physical Sciences: Years 8-10

Date: Friday 15th August

How do I teach Physics? What activities can I do? Where can I find relevant and engaging activities and resources? This program will allow you to answer these questions and more.

This is the third in a series of workshops for secondary science teachers that aims to give teachers the opportunity to expand their subject knowledge and gather new ideas about how to teach some of the more difficult concepts in this Sub Strand of the Australian Curriculum: Science.

Who should attend: Secondary/Middle school teachers.

2. Open Investigations in a middle school classroom

Date: Thursday 28th August

In this workshop teachers will investigate the process and practicalities of inquiry learning in the Science classroom. They will engage in hands-on activities that will inform their understanding of how to deliver a structured science investigation lesson.

This workshop will provide teachers with explicit curriculum materials, investigations and contemporary pedagogical strategies to enable them to successfully incorporate the Science Inquiry Skills into their lessons.

Who should attend: Secondary/Middle school teachers

Time: All Workshops run from 9.00 am – 3.00 pm

Venue: Education Development Centre, Hindmarsh

Cost: Full Day Workshops: Personal Members \$115, Corporate Members \$140, Non-members \$165 (incl GST)

Morning tea and lunch will be provided

Australian Professional Teaching Standards:

All of these workshops reflect the Australian Professional Teaching Standards. Teachers will receive a certificate of attendance that details the Standards covered.

BOOK NOW at: <http://www.sasta.asn.au>

Money Smart Professional Learning Program

SASTA in association with CEASA and the Australian Securities and Investments Commission (ASIC) are offering schools the opportunity to have the Money Smart program introduced to their staff at no cost.

Money Smart Teacher Workshop 1 – Introduction to consumer and financial literacy education in Australia, will provide teachers with an opportunity to investigate a new financial literacy resource developed for R-10 schools through a one hour professional learning workshop led by a Money Smart Facilitator.

The resource package is designed to equip teachers with the tools and resources to effectively teach consumer and financial literacy through real-life contexts and the knowledge and skills to be able to confidently integrate this into and across relevant learning areas of the Australian Curriculum: English, mathematics and science, F-10.

Workshop Purpose:

- to introduce consumer and financial literacy to whole staff — its importance and how it can be taught as a context for implementing the Australian Curriculum
- to provide an overview of the MoneySmart Teaching package and the MoneySmart units of work
- to provide an outline of the professional learning journey for the school to become a MoneySmart School

Workshop Structure:

- A one hour presentation that is interactive and engaging.
- Can be held during a staff meeting or any other suitable time as negotiated by the school.
- Can be held in conjunction with any other SASTA Professional Learning program delivered at the school.

Book Your Session Today!

For inquiries and bookings please contact the SASTA office on (08) 8354 0006 or email Project Officer, Kate Dilger, at projectofficer@sasta.asn.au

SASTA In-School Workshops now available!

SASTAs offer a range of Professional Learning workshops which explore science concepts in detail and provide you with hands on and interactive ideas that you can use in your classroom straight away.

Our workshops cover all Science Understanding areas and incorporate Science Inquiry Skills and Science as a Human Endeavour concepts.

Examples of 2 hour workshops are listed below:

Australian Curriculum Focus

- Science Overview - all Year Level groups

Science Inquiry Skills Focus

- Science for the Early Years (R-2)
- Open Investigations

Planning and Assessment Focus

- Integrating Science and Numeracy (Primary)
- Planning for Inquiry – (Secondary)

Science Understanding Focus

- Biological Sciences
- Chemical Sciences
- Physical Sciences
- Earth and Space Sciences

Science Pedagogy and Resources Focus

- Working with Primary Connections
- The 5Es
- Setting up Primary Connections Resources
- Investigating in Primary Connections

Book your session today!

For enquiries and bookings, please contact SASTA office on (08) 8354 0006 or email SASTA Project Officer; Kate Dilger at projectofficer@sasta.asn.au

Call for Workshop Presenters MASA – SASTA Conference



Friday 28 November 2014

A Science and Mathematics Conference for Middle Years (6-10)

Venue: Norwood Morialta High School (Senior campus)

This conference will provide **high quality professional development** in addition to extensive networking opportunities. The South Australian Science Teachers Association and the Mathematical Association of South Australia are asking for expressions of interest from Middle Years educators to present practical workshop sessions at this conference.

Presenting workshops for your colleagues is an excellent way to share best practice and develop a community of educators across the State. We encourage educators with all levels of experience to submit an abstract.

All abstracts submitted should identify their target audience and detail the content to be covered.

In accepting workshops the conference committee will be looking for a balance across levels of schooling and Science and/or Mathematics content.

Possible Workshop Ideas:

- Hands-on activities for middle school maths and/or science
- Use of technologies in teaching and learning
- Integrated units of work of Science and Mathematics
- Middle years 'Planning in Science and/or Mathematics'
- Experiences in Planning integrated units of work
- Ways of motivating students to consider maths & science in their future careers
- On-line learning projects
- Improving students confidence and experiences in Science and Mathematics

Workshops should model the explicit pedagogies and content of the Australian curriculum

Application to present a workshop: Persons interested in presenting a workshop at this conference should submit their abstract online at www.sasta.asn.au **Workshop presenters will receive a \$50 discount on their registration fee.**

Supported by: **creditunionsa** knowledge counts 

Call for Annual Conference Convenors

SASTA would like to hear from science teachers who may be interested in convening next year's Annual Conference & Expo, which is scheduled to held on Monday 13 & Tuesday 14 April 2015. Previous conferences have provided an excellent opportunity for participants to share best practice and access the latest resources. Expressions of interest detailing any relevant experience can be emailed to eo@sasta.asn.au

SASTA Awards

Start thinking now for 2015

There are many great teachers out there that SASTA would like to acknowledge, but often they don't get nominated for awards because teaching is a very busy job and people don't get the time to fill in nomination forms. Start thinking now. Alert your Principal.

There are many awards for SASTA members:

- SASTA Medal – for significant contribution to SASTA;
- Credit Union SA/SASTA Outstanding Teacher Award – for junior primary, primary, middle years and senior years teachers;
- Helen Castle Memorial Scholarship – worth \$500 for country teachers to attend the SASTA Annual Conference

Nomination forms are available at www.sasta.asn.au.
Nominations close Monday 2 March 2015 at **4:00 pm**.

Chemistry Investigations Manual

Assessment Of Stage 2 Chemistry Using Sace Performance Standards

A new book for SA Chemistry Teachers.

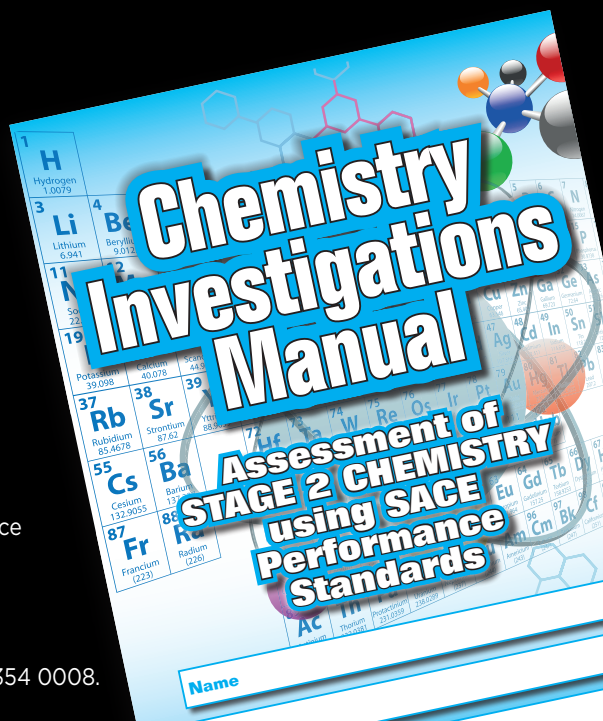
The Chemistry Investigations Manual has been prepared to meet the needs of teachers and students in line with the new SACE requirements and moderation procedures. The manual contains

- 10 familiar practical activities covering analysis, organic preparation, reaction chemistry and experimental design
- 2 issues investigation activities
- All **Assessment Design Criteria** are addressed
- A comprehensive **Assessment Table** for each activity
- A **Performance Standards Table** matched to each activity
- Intended Student Learnings are identifiable within each activity
- A free set of Teaching Notes provided to assist staff
- Prepared by experienced chemistry teachers and moderators Lynton Hall, Ian McMahon and Clive Nikkerud
- It is a **student workbook** rather than a photocopiable teacher resource
- Preview sample pages on the SASTA website

Order now from SASTA at the price of \$18 incl.GST.

N.B. Minimum order of 5 copies. On Sale Now for \$18.00 incl.GST

Purchase online at www.sasta.asn.au or fax a school purchase order to 8354 0008.



The SASTA Biology Practical e-manual

All of the contents for the popular Biology Practical Manual now available as .docx and .pdf files on CD.

KEY FEATURES

- The Print edition of the 2015 Manual will still be available as usual
- Two 'Completion' type and Two 'Design' type Practicals are provided for each of the Four major Topics
- Assessment tables that can be used to meet SACE requirements according to Performance Standards
- An annotated exemplar Practical report
- A sample Exam-style Practical Question with suggested answer
- Comprehensive Teaching Notes for all Practicals for Staff information
- The annual School Site Licence fee will depend on the size of the school and will be about half the cost of the paper version



Visit the SASTA website for pricing and sample .docx/.pdf files – freely available to download and trial in your school.

SASTA Early Career Science Teacher Conference October 10th 2014 Immanuel College

8.30 am	Registrations			
8.45 am	Opening and Welcome			
	Focus of Presentation			
9.00 am	Session 1 Australian Curriculum	Science as a Human Endeavour in the Australian Curriculum Megan Ballantyne Coordinator Primary Australian Curriculum & Primary Science Specialist	The Essence of Science Katrina Elliot DECD Teaching and Learning Services	All you need to know as an early career teacher about the Australian Professional Standards for Teachers Leila Kasprzak DECD
Year level Focus		Primary Years	Middle/Senior Years	All Year Levels
10.15 am	MORNING TEA			
10.30 am	Session 2 Engaging with Pedagogy	Numeracy Strategies in Primary Science Adrian Dilger Catholic Education SA	Critical and Creative Thinking Strategies Deb Forder Immanuel College	Differentiated Learning Christine Grzesik Seymour College
Year level Focus		Primary Years	Middle Years	Secondary
11.45 am	Session 3 Creative Classroom Strategies	Classroom Strategies that Enhance Learning Lynda Garwood Catholic Education SA	Creating a Blended Learning Classroom Joanne Cowley Immanuel College	Using ICT to Enhance Learning Jeremy LeCornu Brighton Secondary School
Year level Focus		Primary Years	Middle Years	Secondary
1.00 pm	LUNCH			
1.30 pm	Session 4 Content Knowledge and Understanding	Using Magic in Science Lessons James Young Retired Primary Educator	Physics is Fun – let the questions begin! Paula Mills Prince Alfred College	Snap Crackle Pop!-Chemical Sciences 8-10 Belinda Hawker Hamilton Secondary College
Year level Focus		Primary Years	Primary/Middle Years	Secondary
2.45 pm	Session 5 Resources to Enhance Learning	Primary Connections and the Australian Curriculum Peter Turnbull	Sustainability Across the Australian Curriculum Angela Andrews Cool Australia	Space Science in Schools Flavia Tata Nardini Launchbox
4.00 pm	CLOSE AND HAPPY HOUR			

SASTA 2014 Study Guides

**ORDER
NOW
\$25**
EACH INC. GST



Biology
Chemistry
Geology
Nutrition
Physics
Psychology

Copies of some past editions of the SASTA Study Guides, including exam answers, are available for \$15.00

SASTA study guides (approx. 200 pages) are the complete resource for students preparing for Year 12 SACE Board of SA exams.

These guides include questions with worked solutions covering each topic in the Subject Outline and address all sections of the exam.

Please fax school purchase order to 8354 0008 or order online at www.sasta.asn.au

Inquiries concerning resources can be answered by the SASTA office by telephoning 8354 0006 or email office@sasta.asn.au

2014 Exam Prep Seminars

Gain maximum benefit from your study time

- meet the Study Guide editorial teams, consisting of many of our most experienced teachers.
- discuss exam techniques and receive hints for answering questions.
- discuss the Chief Examiner's comments for last year's exam paper.
- discuss the extended response requirements.

Registration and Cost

Registration is only available online at www.sasta.asn.au. The cost of this 2.5 hour session is \$15. Early bird registration is available for \$10.

For teachers registering a class, please fax a list of participants names with school purchase order number and the school will be invoiced accordingly.

Dates

Biology 2:30pm - 5:00pm	Saturday 6 September
Physics and Psychology 2:30pm - 5:00pm	Saturday 13 September
Chemistry and Nutrition 2:30pm - 5:00pm	Saturday 20 September

To be held in September

Bookings are required. Students are encouraged to bring their Study Guides with them for each session.

Venues

All seminars will be held at The University of Adelaide, Napier Building, Lower Ground Floor.

Study Guides can be purchased online at www.sasta.asn.au

www.sasta.asn.au
Supporting Teachers of Science
Advancing Science Education

