Presentation Ceremony

Friday 20 September

SASTA OLIPHANT SCIENCE AWARDS

SOUTH AUSTRALIAN SCIENCE TEACHERS ASSOCIATION

SA'S LARGEST SCIENCE COMPETITION

2019

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Government of South Australia
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SASTA South Australian Science Teachers Association

The South Australian Science Teachers Association would like to thank the sponsors of the Oliphant Science Awards

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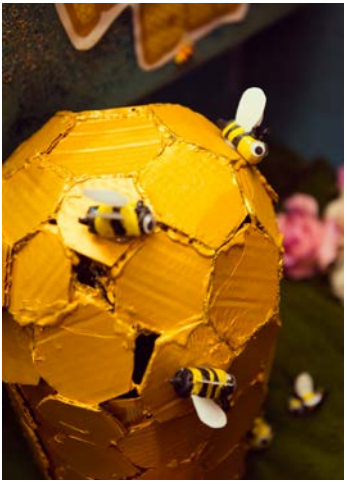
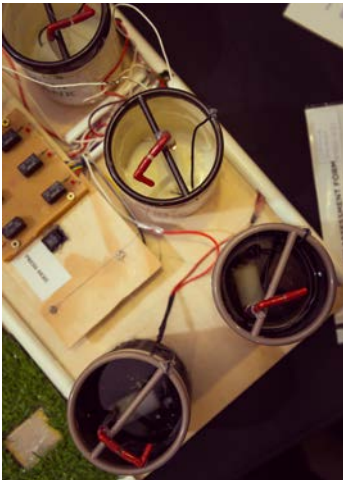


Contents



Congratulations to all Oliphant Science Award participants and prize winners.

With your scientific curiosity piqued, let this direct your future career choices.

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A message from the SASTA President

The Oliphant Science Awards are one of the many activities organised each year by the South Australian Science Teachers Association to assist science education in schools and in our community. A knowledge and awareness of science in our daily lives is essential for all Australians in the twenty-first century. Learning science encourages students to develop a range of skills such as observation, prediction and communication as well as expanding their knowledge both within and between the diverse domains of science. The Oliphant Science Awards provide students with an opportunity to extend their scientific literacy, by showing interest in and understanding of the world around them, engaging in discussions about science, and being able to make informed choices about the environment and their own health and wellbeing.

SASTA's strength lies in our members, and in the many highly committed educators who volunteer their time out of school hours to ensure that we continue to serve the needs of all teachers of science. Our members are drawn from all education sectors, teaching all year levels across the State. We are also fortunate to have a permanent secretariat to ensure the continuing smooth functioning of all aspects of our business.

Affiliation with the Australian Science Teachers Association (ASTA) and with the International Council of Associations for Science Education (ICASE) ensures that our science teachers are in touch with developments taking place in science education throughout the world. SASTA members also benefit from and contribute to national and international conferences, teacher exchange schemes, overseas or local study fellowships and access to a variety of science competitions for their students. SASTA provides professional learning opportunities to teachers within our State through facilitating workshops and conferences, and by its publications.

SASTA develops and maintains close links with employment authorities, businesses, industry and the tertiary education sector. Working closely with such organisations allows us to develop programs, activities and resources that reflect the nature of science in our community. SASTA greatly appreciates the support and sponsorship it receives from these partners and thanks them for sharing our commitment to effective learning in science.

Science, together with the technologies made possible by scientific research and development, is driving us through a period of rapid technological changes. These changes are, in turn, informing the debate about how the sciences are important, and how they should be taught in our schools. SASTA and our members are closely involved with revisiting and developing ideas about how best to ensure that all students become enthusiastic learners of science.

At SASTA we are proud of our contribution towards supporting learning for teachers and their students. We will continue our commitment to fostering an awareness and appreciation of the roles that science, technology and innovation play in our daily lives and in the future environmental and economic strength of the country.

***Vanessa Fay**, SASTA President*

Sir Mark Oliphant

1901–2000

The South Australian Science Teachers Association has been privileged to have had Sir Mark Oliphant as our Patron for the SASTA Oliphant Science Awards since their inception in 1981.

Like many of the recipients of these awards, Sir Mark was born in South Australia and received his primary and secondary education in state schools here. An outstanding student, Sir Mark investigated a number of career pathways and eventually settled on the pursuit of science at the University of Adelaide. Sir Mark showed a love of tinkering and invention from an early age, and it was in the science laboratories in Adelaide that he started to make his own scientific apparatus. He was to become one of the leaders in the design and construction of revolutionary apparatus, including particle accelerators used to investigate the structure and interactions of the nuclei of atoms.

In 1927 a scholarship took Sir Mark to the famous Cavendish Laboratories in Cambridge, UK where he worked with Lord Rutherford, who was a pioneer in atomic physics.

Together with other great scientists including Fermi, Lawrence and Oppenheimer, Sir Mark created the brave new world of nuclear physics. His expertise in this area was to lead Sir Mark to the Manhattan Project in America and to his participation in the development of the first atomic bomb.

Sir Mark was always a champion of the peaceful uses of atomic energy, and in 1937 accepted his first professorship as head of the Physics Department at Birmingham University where he was to continue to push the boundaries of knowledge of nuclear physics. In this year he was elected as a 'Fellow of the Royal Society'.

In 1955 Sir Mark's reputation as scientist, research director and administrator were well established in the scientific community. This, together with his declared interest in establishing world class educational research facilities in Australia, led Sir Mark back to Australia at the request of the Government. In this year he founded the Research School of Physical Sciences at the newly established Australian National University in Canberra.

In the years after retirement from academic life, Sir Mark became a household name in South Australia where he gave distinguished service as our State Governor from 1971 to 1976.

A clear demonstration of his ongoing support of science and science education was provided to the science community in our state when Sir Mark agreed, in 1981, to lend his name as patron of the SASTA Oliphant Science Awards.

Sir Mark's legacy will live on in many ways, not least through the thousands of students and teachers who participate in these awards annually.

Of special significance is that Sir Mark, through his love of tinkering and invention, made the perpetual Oliphant Trophy himself.

Past Oliphant Trophy Winners

1981 **David Tilley**, Mount Gambier High School
1982 **Andrew McDowell**, Oakbank Area School
1983 **Stella Miller**, Oakbank Area School
1984 **Vernon Wells**, Marryatville High School
1985 **Eleanor Rainsford**, St Peter's Collegiate Girls' School
1986 **David Messenger and Darren Kelly**, Glenunga High School
1987 **Darin Lovett and Edward Dunstone**, Prince Alfred College
1988 **Frank Trimboli and Nikolaos Vogiatzis**, Underdale High School
1989 **Simon Ratcliffe**, Henley High School
1990 **Kingsley Storer**, Prince Alfred College
1991 **John Sanderson**, Pulteney Grammar School
1992 **William Greenrod and Michael Ashley**, Pulteney Grammar School
1993 **Mark Hodson and James Jolly**, Modbury High School
1994 **Mark Hodson,** Modbury High School
1995 **Kyra Reznikov,** Annesley College
1996 **Jamie Messner**, Prince Alfred College
1997 **Erik Procko**, Marryatville High School
1998 **Erik Procko,** Marryatville High School
1999 **Paul Philps, Lydia Rofe and Kristina Miller**, Marryatville High School
2000 **Andrew Royal,** Faith Lutheran Secondary School
2001 **Alexander Cichowski,** Brighton Secondary School
2002 **Samuel Teck Ern Wong**, The Norwood Morialta High School
2003 **Samuel Teck Ern Wong,** The Norwood Morialta High School
2004 **Alyssa Fitzpatrick**, Loreto College
2005 **Konrad Pilch**, St Peter's College
2006 **Finn Stokes**, Australian Science and Mathematics School
2007 **Finn Stokes,** Australian Science and Mathematics School
2008 **Michael Huxley**, St John's Grammar School
2009 **Benjamin Harrison**, Urrbrae Agricultural High School
2010 **Michael Huxley**, St John's Grammar School
2011 **Nina Mao**, Glenunga International High School
2012 **Will Russell**, St John's Grammar School
2013 **Madeleine Lilburn**, Loreto College
2014 **Sarah Damin, Isabelle Greco & Bridget Smart**, Wilderness School
2015 **Kee-An Seet**, Glenunga International High School
2016 **Alexandra Stephenson**, Adelaide Hills Home School Group
2017 **Amber Washington**, Norwood Morialta High School
2018 **Sabrina Lin,** Glenunga International High School

A message from the Convenors

The Oliphant Science Awards are conducted annually by the South Australian Science Teachers Association, and are named in honour of the late Sir Mark Oliphant, our former Patron, and in his time an outstanding supporter and promoter of our student science competition.

The Oliphant Science Awards commenced in 1981, with Sir Mark personally hand crafting the trophies for the best boy and girl entrants. Since then student participation has continued to grow, and very many students throughout South Australia now participate. The wide range of interests and abilities of these students is catered for by the many categories and age groupings that we offer. Students can enter individually or, for many of the categories, participate as part of a group.

Sir Mark personally designed and crafted the titanium metal perpetual trophy that the annual winning student holds for one year. The trophy is then exchanged for an engraved medal at the following year's Award Ceremony.

The Oliphant Science Awards recognise outstanding student work with prizes in each age group and each category. Schools with many winning students are awarded a schools' prize. There are many prizes made available through the generosity of our Sponsors, who are an integral part of the success of our Awards. We acknowledge this support through their attendance at and participation in the Awards Ceremony. Without our sponsors we could not offer such a successful student science competition.

This year we are pleased to acknowledge as our Platinum and Gold Sponsors, the Department for Education & Child Development, Rowe Scientific and the Defence Science & Technology Group.

An essential component of the Oliphant Science Awards is the judging. SASTA acknowledges and thanks the large group of dedicated teachers and supporters of science education who have volunteered to judge the thousands of entries that students prepared for this year's competition. This contribution to SASTA and to science education is greatly appreciated.

The Oliphant Science Awards have once again been a great success thanks to the participation of thousands of students. We know that this participation happens with the encouragement and support given by very many parents and teachers, and we thank you all for this support, coming as it does at a time when student engagement in Science has never been more critical. We also thank and acknowledge the hard work of the SASTA OSA Committee members and volunteers who make this project possible. And finally, we thank the SASTA Office staff for their dedicated commitment

to the success of the Oliphant Science Awards. This is probably the largest project that our association undertakes annually.

Each of the eight Australian state and territory Science Teacher Associations offers student science competitions. At SASTA we are proud that in recent years, our Oliphant Science Awards has been the largest of these state competitions, a success built on the contributions of the many people listed above.

As with the other state and territory competitions, winners of the OSA Scientific Inquiry and Models and Inventions (Engineering) categories automatically progress to the finals of the national BHP Billiton Foundation Science and Engineering competition. Each year we also nominate a Teacher Finalist to the national BHP Billiton Foundation Science and Engineering Awards.

Whatever your role is, we thank you for your contribution to this wonderful project.

Peter Turnbull *and* ***Gerald Little****, Oliphant Science Awards Convenors, 2019*

Masters of Ceremony for the evening

Dr Laura Eadie

Dr Laura Eadie's love of science began in high school and she has pursued this passion ever since. Laura is a leukaemia researcher at the South Australian Health and Medical Research Institute and is the current Peter Nelson Leukaemia Research Fellow. She was the recipient of a prestigious Australian-American Fulbright Scholarship and spent a year learning cutting edge laboratory models in Memphis, Tennessee. She is now using these models to evaluate precision medicine treatment strategies tailored to individual patients. Laura enjoys promoting scientific research to the general public and is a firm advocate for women in STEM careers, mentoring junior researchers in order to inspire the next generation of female scientists.

Dr Philip Gregory

Dr Philip Gregory is the Head of Gene Regulation in Cancer Laboratory at the Centre for Cancer Biology. His research focusses on the major cause of death for sufferers of cancer – the spread of cancer cells from the initial tumour to other organs. In particular, he studies the genetic processes which cause a cancer cell to transform to an aggressive and invasive cell type. Discovering the genetic reasons for this fatal transformation will aid in better diagnosis and treatment of breast cancer. Phil was a Young Tall Poppy winner in 2011.

STEM LEARNING

Preschool to year 12

Proud Platinum Sponsor
South Australian Young Scientist Awards
R - 7 and 8 – 12

The Department for Education has been a sponsor of the Oliphant Science Awards since the inception in 1981.

The Oliphant Science Awards exemplify the inquiry based approach to teaching and learning of Science that is so important for engaging students, and for developing scientific understanding and processes that leads to improved scientific literacy.

Young children are naturally curious and agile explorers who examine carefully and closely the things they encounter. The challenge is to maintain an early interest in science throughout the primary and secondary years.

For educators and leaders, the department is providing professional learning and improved subject knowledge to increase confidence and capability to deliver highly effective STEM teaching in our preschools and schools.

Preschools and schools are strengthening partnerships with business, industries and universities to ensure STEM learning is relevant and contemporary and students have a greater awareness about potential career pathways.

We acknowledge the role that SASTA, through its many volunteers, plays in engaging students in science inquiry and remain a proud sponsor of this important initiative.

Watch the STEM animation on the Department for Education's YouTube.

Youtube.com/SAEducationDept

Government of South Australia
Department for Education

Award Presentations Reception–Year 7

6:00 pm	Seating of winners
6:15 pm	Seating of audience and guests
6:30 pm	Welcome
	Silver Sponsor Prizes

- Catholic Education SA Primary Schools Prizes
- Australian Institute of Energy Prizes
- CSIRO Education/CREST Primary Prizes
- Mobile Science Education Science Communication Prize

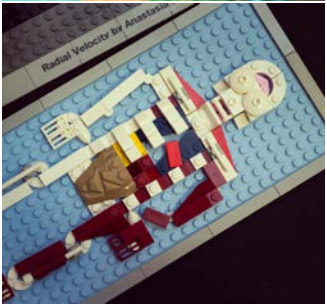
Category Prizes
including presentation of the Bronze Sponsor Prizes

Gold Sponsor Prizes:
Department for Education Young Scientist Awards

The Oliphant Trophy Winner 2019

7:45 pm Conclusion



Silver Sponsor Prizes R–7

Australian Institute of Energy Prizes R–7

Awarded to the best entry at each year level with a sustainable generation and uses of energy theme.

R–2 Ivan Zhiren Leong, St Andrew's School
Science Writing: Needs of Living Things

3–5 Alexander Smith, St Andrew's School
Games: Star Houses

3–5 Eugene Lee, Mawson Lakes School
Models & Inventions: Wireless Power Transmission

6–7 Emily Estcourt Hughes, Walford Anglican School for Girls
Scientific Inquiry: Exploring the Feasibility of Creating a DIY Photobioreactor for Space Tourists

Catholic Education SA Primary School Prizes

Awarded to the best two primary schools with high achievement and participation across a wide range of categories.

1st St Andrew's School

2nd St Thomas School

CSIRO Education/CREST Primary Prize

Award for consistently high achievement and participation in the Scientific Inquiry and Models and Inventions categories.

Best non-CREST School: Walford Anglican School for Girls

Best CREST School: Mawson Lakes School

Mobile Science Education Science Communication Prize R–7

Awarded to the entry with the best explanation of a scientific concept.

6–7 Jessica Humphry St Thomas School
Multimedia: Climate Change Is Real

Category Prizes R–7

Computer Programming & Robotics

R–2			
1st	Daniel Yang	Magill School	Robo Helper
2nd	Jackson Burford	St John's Grammar School – Junior School	Wing Lift
3rd	Keagan Calitz	Walkerville Primary School	Robotics Fun
HC	Tyler Gao	Magill School	Random Name Generator (My Class Names)
3–5			
1st	Muhammad Baber	Mawson Lakes School	Flexi Secure Communicator
1st	Riley Lorenz, Sethanial Jimenea, Carter Camilleri	St Augustine's Parish School	The ScienceAnator
2nd	Saheli Dissanayake	Linden Park Primary School	Saving Our Planet in 365 days
3rd	David Jia, Joseph Wai	St Andrew's School	Multiple Games
HC	Shamika Gorey	Grange Primary School	Password Please
HC	Krishna Neelam	Mawson Lakes School	Space Junk Cleanup
HC	Ginger Vallance	Aldgate Primary School	Rubbish World
6–7			
1st	Caleb Tang	Prince Alfred College	Smart Recycling
2nd	Angelie Vallance	Aldgate Primary School	Virtual Classroom
3rd	Emjay Peacock	Brighton Primary School	Robot Caterpillar 2.0
HC	Jesse Weber	Mawson Lakes School	The Physics of BB8

Crystal Investigation

R–2			
1st	Alastair Kelly	St Peter's College	Crystal Investigation
2nd	Sasha Terao-Curran	St Andrew's School	Crystal Investigation
3rd	Zoe Staszynski, Alexa Staszynski	Virginia Primary School	Crystal Investigations
HC	Jensen Barras	St Andrew's School	Crystal Investigation
HC	Daniela Gareyeva	St Andrew's School	Crystal Refinery
HC	Olivia Lymn	Grange Primary School	Crystal Investigation
HC	Maya Pannall	Burnside Primary School	Crystal Rainbow
HC	Sebastian Zarei	St Peter's College	Crystal Investigation
3–5			
1st	Chloe Lambden	Walkerville Primary School	Crystal Observation Frequency
2nd	Vasili Angelopoulos, Peter Kalamboyas	St Peter's College	Crystal Growing
3rd	Stephanie Delgadinho	Grange Primary School	Crystal Investigation
HC	James Cross	St Andrew's School	Crystal Growing
HC	Jeremy Halling	Eastern Fleurieu R–12 School	Crystal Growing
HC	Kara Heidrich, Tobias Heidrich	Annesley Junior School	Slowing the Cool Down
6–7			
1st	Samantha Pho, Isabelle Yoong	Walford Anglican School for Girls	Our Crystal Investigation
2nd	Ruby Martin	Walford Anglican School for Girls	The Crystal Theory
3rd	Omar Haider	Mawson Lakes School	Crystal Investigation
HC	Willem Koehne	St Andrew's School	Crystal Investigation
HC	Carly Niblett, Tianyue Yang	Walford Anglican School for Girls	Crystal Investigation

Games

R–2			
1st	Jacob Cook	Goolwa Primary School	Science and Ladders
2nd	Tobias Heidrich	Annesley Junior School	Space Hopper
3rd	Samuel Canning	Immanuel Primary School	Dog's Life
HC	Bill Barton, Charlie Stratton	Scotch College	Antarctic Adventure
HC	Brodie Benfield	Grange Primary School	Kick a Goal
HC	Max Blairs	Grange Primary School	The Quiz
3–5			
1st	Alexander Smith	St Andrew's School	Star Houses
2nd	Jessica Helmling, Maddy Redshaw	Immanuel Primary School	The Ocean Game
3rd	Toby Everett, Lucy Everett	Annesley Junior School	Museum Investigation
HC	Krishna Neelam	Mawson Lakes School	My Amazing Body Board Game
HC	Willem Schinckel	St John's Grammar School – Junior School	Enegopoly
HC	Zoe Wright	East Marden Primary School	The Bee Hive
6–7			
1st	Amelie Cook	St Thomas School	Bee the Future
2nd	Makayla Szymanskyj, Matilda Gilding-Smith	Bellevue Heights Primary School	Temperature Drop
3rd	Phoebe Wood, Bree Herman, Sierra Schutz	Upper Sturt Primary School	Rot to Plot
HC	Bridget Fielder	Mitcham Primary School	Atomic Battle (A Periodic Table Card Game)
HC	Willem Koehne	St Andrew's School	100 Not Out
HC	James Mitchell, Angus Smith	Kangaroo Island Community Education	To the Top of the Food Chain
HC	Mia Peterson	St Thomas School	Save the Sea
HC	April Wright, Sophie Ng	East Marden Primary School	Out in Space

Models & Inventions

R–2			
1st	Michael O'Dea	St Thomas School	Cells vs Germs
2nd	Benjamin Low	Immanuel Primary School	Solar System
3rd	Queenie Galliver, Alexander Ragless	Brighton Primary School	Coin Sorter
3rd	Anja Wohsa	Loreto College	Periodic Table
HC	Zara Madakkatel	Burnside Primary School	Conducting Properties of Materials
HC	William Pan, Varish Kumar, Scott Anderson	Prince Alfred College – Prep	Volcano Powered City
HC	Zachary Summerton	Crafers Primary School	Lunar Phases
HC	Louise Yu	Magill School	A puzzle model
3–5			
1st	Maggie McGuinness	Magill School	Pirouette – The Science of Spin
2nd	Ty Braddock	Aldgate Primary School	Hydroelectric Power Station
3rd	Annabelle Tan, Anya Chalwa	St Andrew's School	Tin Foil Tea Set
HC	Oscar Bolton, Ryan Tillman, Oscar Foulkes	Marryatville Primary School	Deep Sea Exploration Pod
HC	Imogen Byrne	Crafers Primary School	Metamorphosis
HC	Ada Gray	Norwood Primary School	Leonardo's Room
HC	Emily Lawton, Summer Bishop, Kiara Magrini	Norwood Primary School	
HC	Eugene Lee	Mawson Lakes School	Wireless Power Transmission
HC	Tom Pisano-Doherty	St Thomas School	The Wonders of a Whirlpool
HC	Max Thompson	St Thomas School	The Tongue
6–7			
1st	Phoebe Wood	Upper Sturt Primary School	Anchiornis Huxleyi
2nd	Kacper Jachacy	Norwood Primary School	Flashing Wicket System
3rd	Emily Richardson, Annalise Hayward, Taylor Gasparin	Walford Anglican School for Girls	Static Power
HC	Isaac Baker	Emmaus Christian College	Home-made Batteries
HC	Dev Gunaratne	Magill School	Hydraulic Arm

Multimedia

R–2			
1st	Brodie Anderson	St Thomas School	Plant Grafting
3–5			
1st	Nidhi Sinhal	St Andrew's School	Science of my Chipati
2nd	Emma Li	Highbury Primary School	Life of a Black Hole
3rd	Scarlett Fisher	Aldgate Primary School	The Life of a Duck
HC	Caitlyn Cox	Virginia Primary School	Science Chef Meat Masterclass
HC	Max Faulkner, Alexander Oakes	Burnside Primary School	Understanding Atoms
6–7			
1st	Luke Ashman	Walkerville Primary School	Is My Lunch a Biohazard?
2nd	Violet Timberlake	Mitcham Primary School	Colours – The Art of Diffusion
3rd	Jesse Weber	Mawson Lakes School	The Ten Most Important Elements

Jesse Weber is also the recipient of the Royal Australian Chemical Institute (RACI) Prize R–7 for the most outstanding entry with a chemistry theme.

Multimedia cont.

6–7			
HC	Ella Brechin	Trinity College – Gawler River	Just Horsing Around
HC	Jessica Humphry	St Thomas School	Climate Change Is Real

Photography

R–2			
1st	William Rae	St Andrew's School	Changing Weather at the Beach
2nd	Max Trento, Sebastian Trento	Immanuel Primary School	Nature's Patterns Tessellations
3rd	Jehu Kim	Magill School	Local Wildlife Around Home
HC	Fred Bendyk, Maximilian Polikin, Liam Rathnaweerage	St Peter's College	
HC	Elise Hyde	Annesley Junior School	There Are Dinosaurs Amongst Us
HC	Kezia Kim	Magill School	Local Wildlife (Edible Weed)
HC	Jack Williams, Brock Harding	Immanuel Primary School	Changing Weather
3–5			
1st	Layla Balestrin	Wilderness School	Gears and Cogs in Everyday Use
2nd	Isla Balestrin	Wilderness School	Many Types of Fly in Nature
3rd	Kirra Lashmar	Kangaroo Island Community Education	Avian Beak Adaptations
3rd	Eloise Powell, Maisie Lewis	Grange Primary School	Avian Beak Adaptations
HC	Katarina Erakovic, Elena Erakovic, Jovan Erakovic	Grange Primary School	Tessellations
HC	Ruby Gosnell	St Thomas School	Many Types of Flight In Nature
HC	Tymek Jachacy	Norwood Primary School	My Neighbours
HC	Kiara Johnson	Aldgate Primary School	Tessellations
HC	Tilly Schammer	Hawthorndene Primary School	Tessellations in Nature
HC	Samuel Smid	Pulteney Grammar School	Changing Weather
HC	Katarina Tertipis	St Thomas School	Changing Weather
6–7			
1st	Omar Haider	Mawson Lakes School	Tessellations in My Garden
2nd	Bridgette Nespolon	St Thomas School	Tessellations in Nature
3rd	Alisha Khan	Salisbury Park Primary School	Wildlife: Wild Flora of Adelaide
3rd	April Wright	East Marden Primary School	Local Wildlife
HC	Kiara Hewitt	Salisbury Park Primary School	Changing Weather
HC	Ceridwen Kellermann Williams	Dernancourt School R–7	Gears and Cogs
HC	Brysen Klein	Kangaroo Island Community Education	Cryptic Nature

Posters

R–2			
1st	Olive Maycock	Loreto College	Why Can a Bird Fly, But I Can't?
2nd	Leja Rajcic	Loreto College	The Life Cycle of My Apple Tree
3rd	Emma Andrews	Colonel Light Gardens Primary School	Science in My Backyard
HC	Alexandra Chong	Walford Anglican School for Girls	Ring of Fire – Tectonic Forces
HC	Dylan Huynh	Walkerville Primary School	Issues Around Plastic
HC	Aliana Hymers	St John's Grammar School – Junior School	Issues Around Plastics

Posters cont.

HC	Benjamin Low	Immanuel Primary School	Plastic in the Ocean
HC	Joshua Low	Immanuel Primary School	How Planes Fly
HC	Yuneth Munasinghe-Sripriyadarshan	Annesley Junior School	Colour Changes Seen With Natural PH Indicators
HC	Alice Schammer	Hawthorndene Primary School	Bees in My Back Yard
HC	Issabelle Sully	East Torrens Primary School	Plastic is a Silent Killer
HC	Nitya Vishwasrau	Magill School	Importance of the Moon
HC	Connor Wallace	Scotch College	The Science of Flight
3–5			
1st	Priyanka Thavarajah	Seymour College	Issues around Plastics
2nd	Peter Kalamboyas	St Peter's College	Tectonic Plates
3rd	Skylar Farley	St Andrew's School	The Ring of Fire
3rd	Zac Grice	Prince Alfred College – Prep	The Science of Flight – Golf Ball Flight
HC	Alyssa Burton	Woodcroft Primary School	
HC	Gemma Clarke	Walkerville Primary School	Bubbles
HC	Seraphine Fisher	Aldgate Primary School	The Life Cycle of a Blackbird
HC	Krystelle Tham	Scotch College	The Wonder of Aeronautical Science
HC	Yasmin Zarrabi	St Andrew's School	Push and Pull forces
6–7			
1st	Asha Lawson	Brighton Primary School	Ring of Fire
2nd	Milla Lokhorst	St Aloysius College	The Importance of the Moon
3rd	Amy Wallace	Scotch College	Science in My Backyard
HC	Eleanor Buckham	St Aloysius College	Science in My Backyard
HC	Amelia Godek	East Torrens Primary School	Ocean Plastics
HC	Bodie Jones	Brighton Primary School	Plastics
HC	Lily Mannion	Woodcroft Primary School	Flight
HC	Imogen Mickel	Virginia Primary School	Moon
HC	Grace Sim	St Aloysius College	Issues Around Plastics

The staff at Mobile Science Education **congratulates ALL entrants** in the Oliphant Science Awards.

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SCIENCE2YOU

You, who **worked hard** because you were **interested** - yes you! You're amazing.

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www.mobilescienceeducation.com.au

Science Writing

R–2			
1st	Ivan Zhiren Leong	St Andrew's School	Needs of Living Things
2nd	Ava Matthews-Ward	Scotch College	Tardigrades
3rd	Emma Ruiqi Liu	St Andrew's School	The Development of Space Science – The Life Cycle of Stars
HC	William Guo	St Peter's College	Meeting Future Energy Needs
3–5			
1st	Dayan Govender	St Andrew's School	Australian Scientific Contributions to Flight
2nd	Chloe Lambden	Walkerville Primary School	Australian Scientific Contributions to Flight
3rd	Shamika Gorey	Grange Primary School	From Alchemy to Chemistry: The Development of the Periodic Table
HC	Seraphina Sun	St Andrew's School	From Alchemy to Chemistry
6–7			
1st	Sophia Tian	Seymour College	Meeting Future Energy Needs
2nd	Abbey Clark	Salisbury Park Primary School	From Alchemy to Chemistry
3rd	Nicholas Whyte	Burnside Primary School	From Alchemy to Chemistry: The Development of the Periodic Table
HC	Nathan Aftab	Rose Park Primary School	STEM – Helping Disabled People
HC	Thomas Pederick-Hull	Salisbury Park Primary School	STEM – Helping Disabled People

Scientific Inquiry

R–2			
1st	Jonny McGee	Norwood Primary School	Roots and Shoots
2nd	Tiffany Gardner, Sienna Morley	Seacliff Primary School	Plantiliser
3rd	Jade Mossop, Asher Treleaven	Seacliff Primary School	Weeds vs Grains
HC	Zach Price	Annesley Junior School	Mould Test
3–5			
1st	Eugene Lee	Mawson Lakes School	Wireless Power Transmission
2nd	Cristina Parletto	Walford Anglican School for Girls	Is Perspiration Really Gross?
3rd	Talley Barnes	Stirling East Primary School	Green Fire Breaks
HC	Emily Bao	Vale Park Primary School	Salt Crystals
HC	Annabelle Laurie	Stirling East Primary School	How Do Fermentation Factors Affect Wine Quality?
HC	Fraser Pashley	Stirling East Primary School	Sweetened Water vs Plain Water
HC	Aurora Sharp	Stirling East Primary School	Test If the Size of the Pupil Changes When Someone Lies
HC	Priyanka Thavarajah	Seymour College	To Wash or Not to Wash (and How)?

Scientific Inquiry cont.

6–7			
1st	Emily Estcourt Hughes	Walford Anglican School for Girls	Exploring the Feasibility of Creating a DIY Photobioreactor for Space Tourists
2nd	Elliot Reader	Stirling East Primary School	What Carniverous Plants Grow in My Area?
3rd	Emily Geisler, Mischa Wilkin, Kirra Tonkin	Williamstown Primary School	Is Bottled Water Worth the Price?
HC	Samara Brown	Redwood Park Primary School	Plants and Music
HC	Annabelle Fleming, Hazel Osborne	Walford Anglican School for Girls	Best Methods for Collecting Microinvertebrates

Gold Sponsor Prizes R–7

Department for Education Young Scientist Awards R–7

1st Phoebe Wood, Upper Sturt Primary School
Eugene Lee, Mawson Lakes School

2nd Chloe Lambden, Walkerville Primary School
Omar Haider, Mawson Lakes School

3rd Priyanka Thavarajah, Seymour College
Elliot Reader, Stirling East Primary School

Government of South Australia
Department for Education

Oliphant Trophy Winner 2019

For outstanding science content.
Presented by Ms Monica Oliphant.

6–7 Phoebe Wood, Upper Sturt Primary School
Models & Inventions: Anchiornis Huxleyi

Australian Government
Department of Defence
Science and Technology

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Award Presentations Years 8–12

7:45 pm	Seating of winners
8:00 pm	Seating of audience and guests
8:15 pm	Welcome

Category Prizes
including presentation of the Bronze Sponsor Prizes

Silver Sponsor Prizes

- Australian Institute of Energy Prizes
- CSIRO Education/CREST Prizes
- Flinders University Environment Prize
- Flinders University Science Prize
- Mobile Science Education Science Communication Prize
- The University of Adelaide, Faculty of Engineering, Computer & Mathematical Sciences Prize
- The University of Adelaide, Faculty of Sciences Prize

Gold Sponsor Prizes

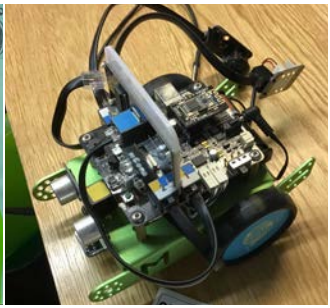
- Defence Science and Technology's Secondary School Prizes

Platinum Sponsor Prizes

- Rowe Scientific New/Country Secondary School Award
- Department for Education Young Scientist Awards

The Oliphant Medal and the Oliphant Trophy 2019

9:30 pm	Conclusion




Category Prizes 8–12

With thanks to Rowe Scientific for sponsoring all of this year's 8–12 Awards.

Computer Programming & Robotics

8			
1st	Anjana Hiripitiya	Glenunga International High School	Automatic Watering System
2nd	Blake Tourneur, Aidan Fahy, Jet Dixon	St John's Grammar School – Senior School	
EA	Savitha Lamahewa	Glenunga International High School	Hand Written Digit Recognition Using Machine Learning
9–10			
1st	Kyan Percevault	St John's Grammar School – Senior School	Motion Simulation
Kyan Percevault is also recipient of the Australian Institute of Physics (AIP) Prize for the most outstanding entry with a physics theme.			
2nd	Isaiah Ajaero	Concordia College	Generating Generations
3rd	Dinan Perera	Prince Alfred College	CAP – Computer Aiding Program
EA	Savin Dissanayake	Glenunga International High School	Smart Fertilisers
EA	Natalie Teasdale, Isabella Ferraro-Martin, Amelia Saunders	Loreto College	The Wonders of Space
11–12			
EA	Aidan Carling, Huey Pretila, Sam Pallis	Australian Science and Mathematics School	Universal Position App

Crystal Investigation

8			
1st	Danae Angelopoulos	Walford Anglican School for Girls	Crystal Investigation
9–10			
1st	Amna Mateen	Unley High School	The More Attention Given, the Better It Will Grow
2nd	Achsa Binugeorge	Unley High School	Does Temperature Affect Growth
3rd	Iknoor Khurana	Brighton Secondary School	Crystal Investigation
11–12			
1st	Inzhu Musrepbek, Ky Bao Chau (Clara) Ho	Unley High School	Crystal in a Water Incubator Maintained at 25 Degrees Will Facilitate Crystal Growth

Games

8			
1st	Sienna Birss, Ashleigh Edwards	Mitcham Girls High School	Stem Bacteria
2nd	Hannah Garnett, Jasmine Curnow	St John's Grammar School – Senior School	Race of the Planets
3rd	Evie Robb Williams, Emma Riddell	Walford Anglican School for Girls	70 Days Until Afterlife
EA	Taewan Kim, Anton Ivanov, Nathan Low	Glenunga International High School	Bird Watch

Games cont.

9–10			
1st	Lily McFetridge	Walford Anglican School for Girls	Energise!
2nd	Verity Beddome, Wanzheng Dong	Walford Anglican School for Girls	Journey Through the Digestive System
3rd	Imke Mentz	Walford Anglican School for Girls	Escape to the Future
EA	Georgia Chadderton	Walford Anglican School for Girls	The Brain Game
11–12			
1st	Amber Washington	University Senior College	Once Upon a Crime

Amber Washington is also the recipient of the Collison and Co. Prize R–12 for the entry with the most inventive design.

Models & Inventions

8			
1st	Gurleen Kaur	Walford Anglican School for Girls	Electro-Spinner
2nd	Rowan Barnett	St John's Grammar School – Senior School	Slayer Exciter
3rd	Tarush Srivastava	Glenunga International High School	Thermoelectric Infinite Power Source
EA	Jack Button	St John's Grammar School – Senior School	Portable USB Charger
EA	Brooke Fuller, Thamara Galindio-Gutierrez	Mitcham Girls High School	Dead Sea
EA	Lian Mitchell	Concordia College	Penguin Buzz
9–10			
1st	Chrissie Mower	Mitcham Girls High School	Guitar
2nd	Harrish Raju Deepa	Pulteney Grammar School	Plant Vitamin Deficiency
3rd	Lily Bedford	Glenunga International High School	Torricelli Trumpet
EA	Sienna Moreau	Walford Anglican School for Girls	A Demonstration of Pumped Hydro
11–12			
1st	Penelope Casson	Wilderness School	Molecules in Membranes
2nd	Isabella Wallwork	Wilderness School	Cell Membrane Model

Multimedia

8			
1st	Asira Suetrong	Glenunga International High School	
2nd	Molly Stewart, Matilda Alford	Walford Anglican School for Girls	Tardigrades
3rd	Zara Bowles	Mitcham Girls High School	Tennis Ball Drop
EA	Rianna Herring, Nahyun Kim, Kelly Spreitzer	Mitcham Girls High School	Race Day
9–10			
1st	Toby Trenwith	Salisbury High School	Racing Science
2nd	Aneri Shah, Sam Gorrie	Glenunga International High School	What is the Effect of Geographical Positioning on Daylight?
3rd	Caitlin Ashby, Emily Ashby, Caitlin Gluyas	Walford Anglican School for Girls	Striding for Success
11–12			
1st	Anita Suetrong	Glenunga International High School	The Immune System

Photography

8			
1st	Kasimir Kellermann Williams	Glenunga International High School	Cogs and Gears
2nd	Caitlin Wood	Urrbrae Agricultural High School	Tessellations
3rd	Kira Loh, Melody Zhang, Parampreet Kaur	Glenunga International High School	Changing Weather
EA	Danae Angelopoulos	Walford Anglican School for Girls	Local Wildlife
EA	Cynthia Sun, Sarah Gul, Mushi Pham	Glenunga International High School	Different Types of Clouds
EA	Jess Williams	St John's Grammar School – Senior School	Tessellations
9–10			
1st	Josephine Oehler	Seymour College	Tessellations in Nature
2nd	Janay Will	Mitcham Girls High School	Wildlife
3rd	Eliza Molier	Mitcham Girls High School	Wildlife
EA	Luci Hancock	St John's Grammar School – Senior School	Local Wildlife
EA	Kiaya Hessler	Mitcham Girls High School	Tessellations
EA	Olivia Mazurek	Mitcham Girls High School	Wildlife
EA	Charlotte Threadgate	Woomera Area School	Local Wildlife
EA	Toby Trenwith	Salisbury High School	Changing Weather
EA	Emily Villios	St John's Grammar School – Senior School	Diprotodontia
11–12			
1st	Amber Washington	University Senior College	Tessellations
2nd	Isabelle Lilburn	Loreto College	Tessellations

Posters

8			
1st	Ayesha Andary	Mitcham Girls High School	Push and Pull
2nd	Sanjana Varakavi	Mitcham Girls High School	Plastics
3rd	Molly Brooksby	Gleeson College	The Importance of the Moon
EA	Sahiba Tayeeb	Underdale High School	Magnetism
9–10			
1st	Josephine Oehler	Seymour College	The Science of Flight
2nd	Olivia West	Mitcham Girls High School	Plastics
3rd	Kasey Hancock	Mitcham Girls High School	Birds' Flight
EA	Ayiana Brown	Woomera Area School	The Issues with Plastic in the Ocean
EA	Josephine Oehler	Seymour College	Wanted: Plastics
11–12			
1st	Isabelle Lilburn	Loreto College	The Importance of the Moon
2nd	Amber Washington	University Senior College	The Importance of the Moon
3rd	Madeleine Flapper	Loreto College	The Importance of the Moon

Science Writing

8			
1st	Gunin Singhal	St Peter's College	How I (The Periodic Table) Came to Be
2nd	Matthew Lim	Pembroke School	GMO: Feeding the Future

Matthew Lim is also the recipient of the Australian Society of Biochemistry and Molecular Biology Prize R–12 for the most outstanding entry with a biochemistry or molecular biology theme.

3rd	Ava Cannard	Gleeson College	Revolutions in Planetary Photography
EA	Lachlan Cannard	Gleeson College	Development of the Space Suit
EA	Gemma Reid	Walford Anglican School for Girls	STEM in the Community

Science Writing cont.

9–10			
1st	Dillon Tay	Glenunga International High School	The Black Box: Australia's Scientific Contributions to Flight
2nd	Josephine Oehler	Seymour College	Biofuels – Fueling our Future
Josephine Oehler is also the recipient of the Royal Australian Chemical Institute Prize 8–12 for the most outstanding entry with a chemistry theme.			
3rd	Maddie Walker	Walford Anglican School for Girls	Needs of Living Things: Living Things' Need for Biodiversity
EA	Savin Dissanayake	Glenunga International High School	Enable the Disabled
EA	Ella Hamilton	Walford Anglican School for Girls	The GPS: The science and Impacts Behind the Revolutionary System
EA	Jessica Hands	Tatachilla Lutheran College	A New Innovative Medical Therapy in the Treatment of Davey Syndrome
EA	Shani Keane	Walford Anglican School for Girls	Stem Cell Research
EA	Lily Restas	Walford Anglican School for Girls	The Needs of Living Things – The Marine Ecosystem
11–12			
1st	Pasindu Bandara	Glenunga International High School	The Effect of Herbal Medicine on Inhibition of Bacteria
2nd	Annja Haywood	Eynesbury Senior College	Optic Tweezers in Physics and Their Use in Other Scientific Areas
3rd	Sparsh Tiwari	Prince Alfred College	DNA Origami
EA	Marguerite Potter	Unley High School	Great White Sharks: A Keystone Species
EA	Abraham Wilson	Brighton Secondary School	CRISPR

Scientific Inquiry

8			
1st	Nicola Strever, Carla Strever, Rebecca Trezona	Mitcham Girls High School	Weight of Bag vs Curve of Spine
2nd	Christine Syrianos, Scarlett Minney	Walford Anglican School for Girls	How Loud Will That Be?
3rd	Thanabammini Balasaravanan	Immanuel College	How Stressed Are Kids?
EA	Nina Seedsman, Brooke Jones	The Hills Christian Community School	Plant Light Conditions
9–10			
1st	Surani (Nethaya) Karunagaran	Emmaus Christian College	Voltage Drop in Various AAA Alkaline Batteries Over Time
2nd	Prathicksha Venkatesan	Walford Anglican School for Girls	Are There Any Harmful Bacteria on Healthcare Workers' Phones?
3rd	Ashlee Dunthorne	Emmaus Christian College	Is There Any Correlation Between a Person Being Colour Blind and Their Age, Sex, Hand Preference or Other Vision Impairment?
3rd	Vanessa Ricks	Emmaus Christian College	Products for Paint Removal from Material
EA	Kayla Burnett	Emmaus Christian College	Which Sewing Machine Stitch Is the Strongest When Force Is Exerted?
EA	Sam Gorrie	Glenunga International High School	The Effectiveness of Antibacterial Agents on Common Household Pathogenic Organisms
EA	Neriah Henning	Emmaus Christian College	Yeast Reaction
EA	Toby Trenwith	Salisbury High School	How Sweet Is It?
EA	Cameron Wright	Brighton Secondary School	Properties of Elements Investigation
11–12			
1st	Jiayi Qian	Glenunga International High School	Juglone in English Walnuts: Allopathic Effects on Common Wheat
2nd	Alexandra Stephenson	Eynesbury Senior College	Effectiveness of Orthokeratology and Atropine in Treating Myopia
3rd	Yashika Paul	Glenunga International High School	Soapberries: Natural Alternatives to Chemical Detergents

Silver Sponsor Prizes 8–12

Australian Institute of Energy Prizes 8–12

Awarded to the best entry at each year level with a sustainable generation and uses of energy theme.

8 Gurleen Kaur, Walford Anglican School for Girls
Models & Inventions: Electro-Spinner

9–10 Sienna Moreau, Walford Anglican School for Girls
Models & Inventions: A Demonstration of Pumped Hydro

CSIRO Education/CREST Secondary Prize

Award for consistently high achievement and participation in the Scientific Inquiry and Models and Inventions categories.

Best non-CREST school: Glenunga International High School

Best CREST School: Brighton Secondary School

Flinders University Environment Prize 8–12

Awarded to the most inspiring entry covering an environmental issue in South Australia.

11–12 Yashika Paul, Glenunga International High School
Scientific Inquiry: Soapberries: Natural Alternatives to Chemical Detergents

Flinders University Science Prize 8–12

Awarded to the outstanding research-based entry in science.

9–10 Prathicksha Venkatesan, Walford Anglican School for Girls
Scientific Inquiry: Are There Any Harmful Bacteria on Healthcare Workers' Phones?

Mobile Science Education Science Communication Prize 8–12

Awarded to the entry with the best explanation of a scientific concept.

11–12 Penelope Casson, Wilderness School
Models & Inventions: Molecules in Membranes

The University of Adelaide, Faculty of Engineering, Computer & Mathematical Sciences Prize

Awarded to the most outstanding entry with an engineering, mathematical or engineering theme.

9–10 Lily Bedford, Glenunga International High School
Models & Inventions: Torricelli Trumpet

The University of Adelaide, Faculty of Sciences Prize

Awarded to the most outstanding entry highlighting the benefits of scientific research to the community.

8 Matthew Lim, Pembroke School
Science Writing: GMO: Feeding the Future

Gold Sponsor Prize

Defence Science & Technology's Secondary School Prizes

8–10

1st Walford Anglican School for Girls

2nd Mitcham Girls High School

11–12

1st Glenunga International High School

2nd Loreto College

Platinum Sponsor Prizes

Rowe Scientific New/Country Secondary School Prize

Awarded to the best student entry from a new/country school.

9–10 Toby Trenwith, Salisbury High School
Multimedia: Racing Science

9–10 Charlotte Threadgate, Woomera Area School
Photography: Local Wildlife

9–10 Ayiana Brown, Woomera Area School
Posters: Issues around Plastics

Department for Education Young Scientist Awards 8–12

Young Scientist Awards 8–12

1st Amber Washington, University Senior College
Toby Trenwith, Salisbury High School

2nd Josephine Oehler, Seymour College
Pasindu Bandara, Glenunga International High School

3rd Isabelle Lilburn, Loreto College
Dillon Tay, Glenunga International High School

Oliphant Medal

Presented by Ms Monica Oliphant to the 2018 Oliphant Trophy Winner

11–12 Sabrina Lin, Glenunga International High School
Scientific Inquiry: Effect of Citrus Lemon Juice on the Senescence of Lilium 'Casa Blanca'

Open Day, Sunday 25 August



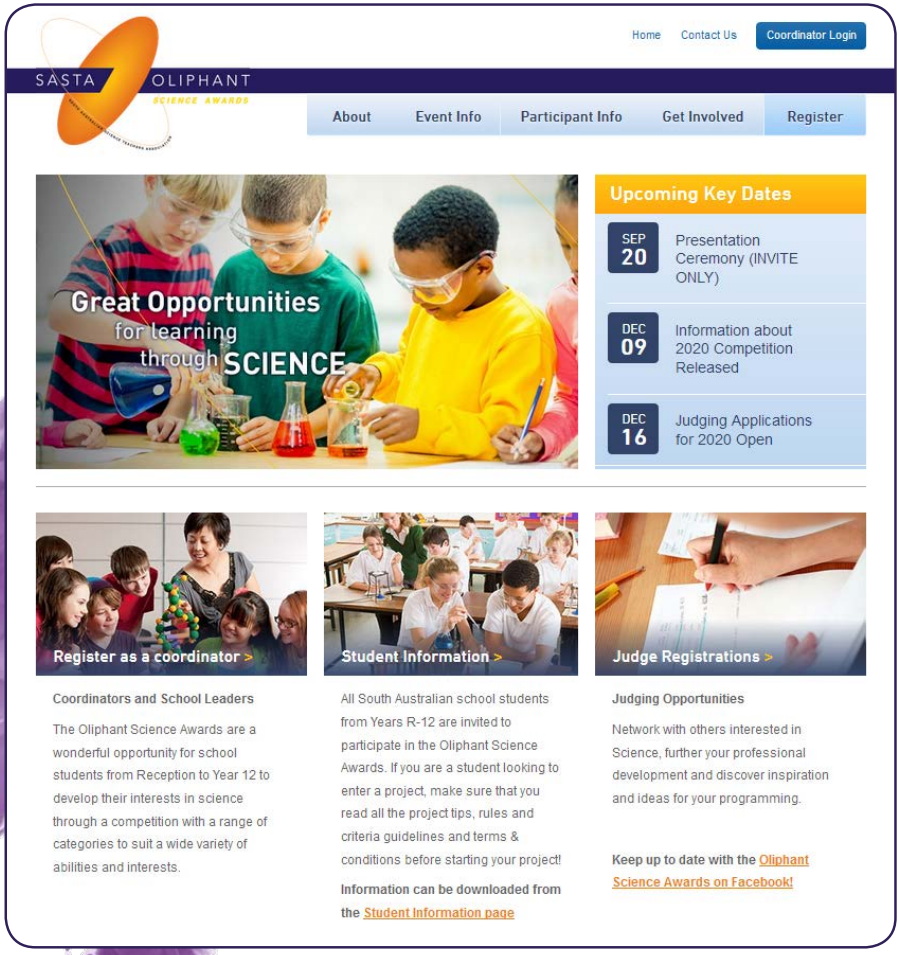







For all information about the Oliphant Science Awards

www.oliphantscienceawards.com.au



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