Presentation Ceremony

Friday 13 November

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Department for Education

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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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A message from the SASTA President

The Oliphant Science Awards are conducted annually by the South Australian Science Teachers Association (SASTA) and were named in recognition of the contribution made to Science by SA scientist Sir Mark Oliphant. The 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.

Since the start of the Awards in 1981, participation has grown and students from all over South Australia now enter the competition. The wide range of interests and abilities of these students is catered for by the many categories and age groupings offered. Student participation is further encouraged because group entries are allowed in many categories.

The Oliphant Science Awards is 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. SASTA develops and maintains close links with education authorities, businesses, industry and the tertiary education sector. Working closely with such organisations allows us to develop resources, publications, programs and professional learning opportunities like workshops and conferences for SA teachers.

The support and sponsorship that SASTA receives from our partners also enables us to recognise and celebrate the excellent work of students in these Awards. With many prizes in each age group and category, this Ceremony is a testament to the huge effort made by students, often in close collaboration with their teachers. At the end of the ceremony, you will see the perpetual trophy that Sir Mark designed and crafted. The winning student holds this for one year, then the trophy is exchanged for an engraved medal at the following year's Ceremony.

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 group of excellent staff who form a permanent secretariat to ensure the continuing smooth functioning of all aspects of our business. Because of such strong support from our members and staff, SASTA has the capacity and expertise to be closely involved in developing ideas about how best to ensure that all students become enthusiastic learners of science.

At SASTA we are proud of our contribution to 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.

***Dr Jane Wright**, 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

2019 Oliphant Trophy winner Phoebe Wood with Monica Oliphant

2018 Oliphant Trophy winner Sabrina Lin with Monica Oliphant

Past Oliphant Trophy Winners cont.

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
2019 **Phoebe Wood**, Upper Sturt Primary School

2015 Oliphant Trophy winner Kee-An Seet with Monica Oliphant and 2014 winners Bridget Smart, Sarah Damin & Isabelle Greco

2016 Oliphant Trophy winner Alexandra Stephenson with Monica Oliphant

2017 Oliphant Trophy winner Amber Washington

2013 Oliphant Trophy winner Madeleine Lilburn with Monica Oliphant

2012 Oliphant Trophy winner Will Russell with Monica Oliphant

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 Presentation 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 Presentation 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, Rowe Scientific and the Defence Science & Technology Group. As well as the Australian Institute of Energy as our Science Writing Category Sponsor and the University of South Australia as our Scientific Inquiry Category Sponsor.

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, selected winners of the OSA Scientific Inquiry and Models and Inventions (Engineering) categories 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, 2020*

Masters of Ceremony for the evening

Dr Robert Lawrence and Mrs Rosalie Lawrence

Robert and Rosalie Lawrence are conservationists who are passionate about using citizen science to connect people to the natural world.

They have a broad interest in plants, especially native orchids and over the years, have spent many hours promoting and educating the public about the orchids through fieldtrips and workshops. In recent days they have become more involved in surveys and collecting data for researchers.

Since 2006, Robert and Rosalie have run Heritage Bushcare, providing sensitive weed control for the conservation of threatened plants and mentoring the next generation of South Australia's conservation land managers.

They are actively involved in numerous citizen science programs, including the Great Koala Count, BioBlitzes, the City Nature Challenge for Greater Adelaide and Wild Orchid Watch (WOW). The WOW project is testament to Rosalie and Robert's vision to engage Australian amateur naturalists, orchid enthusiasts and citizen scientists in large scale data collection in collaboration with scientists and large scientific institutions.

Reception 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 their 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 science teaching in our schools.

Schools are strengthening partnerships with business, industries and universities to ensure science 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 – what is it for?' animation on the Department for Education's YouTube.

https://youtu.be/YRUItMn89T0

Oliphant Trophy Winner 2020

For outstanding science content.
Presented by Ms Monica Oliphant.

11-12 Raihanah Pranggono, Glenunga International High School
Scientific Inquiry: Investigating the Effects of Disaccharides and Monosaccharides on the Rate of Respiration in Saccharomyces cerevisiae

Oliphant Medal

Presented by Ms Monica Oliphant to the 2019 Oliphant Trophy Winner

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

Platinum Sponsor Prizes

Rowe Scientific New/Country Secondary School Prize

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

7–8 Callum Klein, Kangaroo Island Community Education
Photography: Life in the Wetlands

7–8 Sam Weavers, Adelaide Botanic High School
Computer Programming, Apps & Robotics: A Day in the Life of a Virus

Department for Education Young Scientist Awards R–6

1st Chloe Lambden, Walkerville Primary School
Eugene Lee, Pedare Christian College

2nd Priyanka Thavarajah, Seymour College
Krishna Neelam, Mawson Lakes School

3rd Kara Heidrich, Annesley Junior School
Isaac Powell, Grange Primary School

Department for Education Young Scientist Awards 7–12

1st Isabelle Lilburn, Loreto College
Regan Nelson, Prince Alfred College

2nd Josephine Oehler, Seymour College
Lachlan Miegel, St John's Grammar School
Blake Tourneur, St John's Grammar School

3rd Raihanah Pranggono, Glenunga International High School
Sam Weavers, Adelaide Botanic High School

Gold Sponsor Prize

Defence Science & Technology's Secondary School Prizes

Australian Government
Department of Defence

7–10

1st Walford Anglican School for Girls

2nd Glenunga International High School

11–12

1st Glenunga International High School

2nd Loreto College

Science Writing Category Sponsor Prizes

AUSTRALIAN INSTITUTE OF ENERGY
SOUTH AUSTRALIA

Australian Institute of Energy Prizes R–12

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

R–2 Jack Williams, Immanuel Primary School
Models & Inventions: Sustainable House Model

3–4 William Chen, Highgate School
Models & Inventions: Future Tower

3–4 Jacob Wong, Highgate School
Models & Inventions: Future Tower

5–6 Eugene Lee, Pedare Christian College
Models & Inventions: Dye Sensitised Solar Cells

7–8 Zeina Aljawhari, Walford Anglican School for Girls
Models & Inventions: Solarspy, Solar Tracking Prototype

9–10 Matthew Lim, Pembroke School
Science Writing: Hidden Waves

Scientific Inquiry Category Sponsor Prizes

University of South Australia

University of South Australia – Sustainable Future Prizes R–12

Awarded to the most inspiring entry highlighting the value of Information Technology, Engineering and Environmental Science to a Sustainable Future.

3–4 Arjun Betti, Norwood Primary School
Scientific Inquiry: Can you grow plants using recycled water from washing machines?

9–10 Rowan Barnett, St John's Grammar School
Models & Inventions: Why do flowers and plants close overnight?

Silver Sponsor Prizes

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 Immanuel Primary School

2nd St Andrew's School

CSIRO Education/CREST Primary Prize

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

Best CREST School: Seymour College

Best non-CREST School: Norwood Primary School

CSIRO Education/CREST Secondary Prize

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

Best CREST School: Brighton Secondary School

Best non-CREST School: Walford Anglican School for Girls

Flinders University Environment Prize 7–12

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

11–12 Yu (Amy) Shi, Glenunga International High School
Scientific Inquiry: Particulate black carbon and its contribution to the urban heat island effect

Flinders University Science Prize 7–12

Awarded to the outstanding research-based entry in science.

9–10 Prathicksha Venkatesan, Walford Anglican School for Girls
Scientific Inquiry: The Effect of Curcumin and Bacteriophage on Multi-Drug Resistant Bacteria

The University of Adelaide, Faculty of Engineering, Computer & Mathematical Sciences Prize 7-12

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

9–10 Regan Nelson, Prince Alfred College
Models & Inventions: The Skyhook Propulsion System (TSPS)

The University of Adelaide, Faculty of Sciences Prize 7-12

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

9–10 Chengcheng Zheng, Wilderness School
Science Writing: Does Radiation make superheroes?

With thanks to Rowe Scientific for sponsoring all of this year's 7–12 Awards.

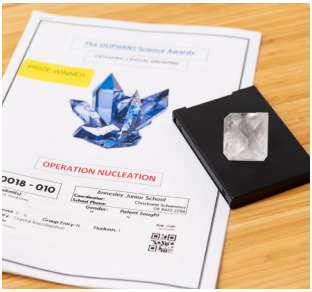
Category Prizes

Computer Programming, Apps & Robotics

R–2			
1st	Nivaan Sardana	St Peter's College	Innovative Lego Robotics Model
2nd	Eric Wang	St Peter's College	Mindstorms
3rd	Lachlan Everett	Annesley Junior School	Blinky the Teeth Cleaning Robot
3–4			
1st	Jackson Burford	St John's Grammar School	Hidden Waves - Doppler Shift Simulator
2nd	Amelia Cavagnaro	Rose Park Primary School	A-BOT to the rescue
3rd	Siddharth Prabhu, Anas Qureshi	Rose Park Primary School	SAN the Chatbot
HC	Patrick Deng, Monica Deng	Highgate School	Object detecting
HC	Louis Kent	Pembroke School	Gravity and Wind
5–6			
1st	Rashmi Adiga	Mawson Lakes School	Solar System Simulation
2nd	Blake Hoendervanger	St Thomas School	Robotic Hand
3rd	Carter Camilleri, Sethanial Jimenea	St Augustine's Parish School	Waste
3rd	Sien Mitchell	Colonel Light Gardens Primary School	Earthquake Alert
HC	Penny Ayres	Immanuel Primary School	Light Tree
HC	Saheli Dissanayake	Seymour College	Can you be a victim of Alzheimer's disease?
HC	Krishna Neelam	Mawson Lakes School	Moon Miner
7–8			
1st	Sam Weavers	Adelaide Botanic High School	A Day in the Life of a Virus
2nd	Luke Mulders	Concordia College	Simulating Ecosystems
3rd	Joshua Cartledge	Glenunga International High School	Rainwater Tank Monitor (RTM)
EA	Caleb Tang	Prince Alfred College	Firetruck
9–10			
1st	Lachlan Miegel, Blake Tourneur	St John's Grammar School	HydroSoil: Smart Irrigation Solutions
2nd	Paul Cyril, Lachlan Blake	The Heights School	An Arduino based turbidity monitor for water quality monitoring
3rd	Sophie Wegener	Glenunga International High School	Dichotomous-key classification game

Crystal Investigation

R–2			
1st	Isaac Powell	Grange Primary School	Crystal Investigation
3rd	Ilona Danilovic, Thaarani Muthukarthikeyan	Immanuel Primary School	Incredible Crystal Collection
HC	Erin Ladthorne	Bellevue Heights Primary School	Erin's crystal
HC	Yuriy Paslavskyy	Grange Primary School	Crystal Investigation
HC	Liev Tingey, Arius Tingey	Bellevue Heights Primary School	Crystal Investigation
3–4			
1st	Chloe Lambden	Walkerville Primary School	Crystals: Is one better than two?
2nd	Odin Swan, Louie Cook	Grange Primary School	Crystal Investigation
3rd	Mikayla Berry-Smith	Grange Primary School	Crystal Investigation
HC	Sophie Cerny, Yuiko Fujihara	East Marden Primary School	Crystal Investigation
HC	Shravenn Mohghanthas	Coromandel Valley Primary School	Crystal Investigation
HC	Sophia Papageorgakis, Emmeline Wingrave, Abbie Liu	Immanuel Primary School	Crystal Investigation
5–6			
1st	Aazeen Haider	Mawson Lakes School	Crystal Investigation
2nd	Jack Theakstone	Annesley Junior School	Operation Nucleation
HC	James Cross	St Andrew's School	Crystal Investigation
HC	Isabella Dragani, Henry Scibberas, Troy Taylor	Star of the Sea School	Crystal Investigation
7–8			
EA	Willem Koehne	St Andrew's School	Crystal Investigation
9–10			
1st	Iknoor Khurana	Brighton Secondary School	Crystal Investigation



Games

R–2			
1st	Samuel Canning	Immanuel Primary School	Buzzing Fun
2nd	Zoe Dowdall	Grange Primary School	Space aboard game
3rd	Lila Nassery, Adeline Wilson	Wilderness School	Guess-o-saur
HC	Kiaan Melwani, Otis Searle	Immanuel Primary School	Alien Invasion
HC	Lucy Rayner	Highgate School	You've Got to Be Squidding Me
HC	Ray Vidanapathirana	Magill School	Grid Plant
3–4			
1st	Alexander Smith	St Andrew's School	The Journey of Photosynthesis
2nd	Willem Schinckel, Harrison McCall	St John's Grammar School	The Race Around Space
3rd	Madeline Redshaw, Jessica Helmling	Immanuel Primary School	Save the Animals game
HC	Abigail Atkinson	Virginia Primary School	Rat Race, The Game
HC	Hugo Cardone	Magill School	Plane Race
HC	Macy Foreman, Evie Cantor	Highgate School	Space Race, The Game
HC	Mika Kaehne	Scott Creek Primary School	SOS. Save our Species
HC	Evangeline Lee, Edie Lydeamore	Wilderness School	Race of the Paleontologists
HC	Toby Pontt	East Adelaide School	Martians on Mars

Games

5–6			
1st	Kara Heidrich	Annesley Junior School	How to build a human body
2nd	Isla Church	Brighton Primary School	Frog Frenzy
3rd	Nainika Vemulapalli, Sara Shafeeu	Bellevue Heights Primary School	Environmental Trivia
HC	Krystelle Tham, Grace McIntyre	Scotch College	The Life of Bees
HC	Katiya Hand	St Thomas School	The Volcano Game
HC	Isla Wagenknecht, Erika Main	Eastern Fleurieu R-12 School	First to Earth
7–8			
1st	Hafsah Khan	Mitcham Girls High School	Zoodo
2nd	Brooke O'Dwyer	Mitcham Girls High School	Circuit Masters
3rd	Lily Gao, Max Lock, Aaron Walsh	Highgate School	To Catch a Cuckoo
EA	Jake Sparrow	Brighton Secondary School	Mars Escape
EA	April Wright	East Marden Primary School	The Lab

9–10			
1st	Lachlan Billing, Leander George, Finlay Bowens	Brighton Secondary School	Space Race
1st	Stuart Vass	Pembroke School	S.C.I.E.N.C.E.
3rd	Olivia Stewart, Mia Krause, Alyssa Smart	Kangaroo Island Community Education	Save a Hoodie
EA	Harriet North, Emma Riddell	Walford Anglican School for Girls	Conquering Everest
11–12			
1st	Hattie Nguyen	Brighton Secondary School	Star Life Cycle
2nd	Taya Lewis, Chloe Baines	Salisbury High School	Science or Shame: The Ultimate Science Board Game

Models & Inventions

R–2			
1st	Sidney Young	St Thomas School	Ninja Strength
2nd	Isha Wechalekar, Aayana Butt, Maryam Cedra Sawad	Wilderness School	Global Warming and Sea Level Rise
3rd	Jack Williams	Immanuel Primary School	Sustainable House Model
HC	Hugo Mallett, Charlie Gray, Louis McCallum	Highgate School	CHL Robot
HC	Alexa Staszynski	Virginia Primary School	Plant Lifecycle
HC	Eliza Zoumis	Immanuel Primary School	Double handed skilltester

Models & Inventions continued

3–4			
1st	Ilan Storer	St Andrew's School	COVID 19 Anatomy of a killer virus
2nd	William Chen, Jacob Wong	Highgate School	Future Tower
2nd	Prisha Jaiswal	Richmond Primary School	Hydraulic lift
HC	Anneliese Bowden, Lilijana Kotorac	Rose Park Primary School	Model
HC	Ben Cameron, Heidi Travers, Evan Fleet	Williamstown Primary School	Pinocchio Power
HC	Oliver Matthews	St Andrew's School	Model
HC	Mya Nickels, Bella Mifsud, Chloe Easson	Immanuel Primary School	Discover Space
HC	Lukas Thakore	East Marden Primary School	Mr Rubbish Sorter
5–6			
1st	Eugene Lee	Pedare Christian College	Dye Sensitised Solar Cells
2nd	Shaya Ismail	Norwood Primary School	Hey AI, what's this fruit?
3rd	Aislinn Lauder	Woomera Area School	The Evolution of the Horse
HC	Josie Adam	Crafers Primary School	Voice Boxes
HC	Isabelle Bonett, Allegra Prince, Allegra Nottage	Walford Anglican School for Girls	Model of a knee with a torn ACL
HC	Dhairya Chousalkar	Mawson Lakes School	Origin and Evolution of Coronavirus
HC	Linus Davies	St Thomas School	Waterspout
HC	Saheli Dissanayake	Seymour College	Bee My Chemist
HC	Shamika Gorey	Grange Primary School	Science of Vaccines (cellular warfare)
HC	James Hall, Toby Dickmann	Vale Park Primary School	Antopoulos
HC	Leonardo Iacopetta, Alex Stewart	Crafers Primary School	Making a linear motor
HC	Sacha Parham	St Thomas School	Tapir Digestive System
HC	Oliver Sainsbury	Brighton Primary School	Refracting Telescope
HC	Milla Weeks	St Thomas School	The Ear
HC	Chloe Yew	Magill School	Animal Cell: Building Block of Life

Models & Inventions continued

7–8			
1st	Zeina Aljawhari	Walford Anglican School for Girls	Solarspy, Solar Tracking Prototype
2nd	Johanna Webb	Walford Anglican School for Girls	Tensegrity - Lego
3rd	Winston Telfer	Lower Eyre Peninsula Home School Group	The Not-so-simple (Ball) Machine
EA	Simran Bruce, Xander Neeskins, Felix Lister	Brighton Secondary School	S.P.E.A.R.
EA	Oliver Fenton, James Cree	Prince Alfred College	Joystick Computer Mouse
EA	Kaitlin Mohais	Mitcham Girls High School	Nuts and Bolts
EA	Jemima Trott	Seymour College	Madagascar Water Solution
9–10			
1st	Regan Nelson	Prince Alfred College	The Skyhook Propulsion System (TSPS)
2nd	Leah Hall	Brighton Secondary School	Darwin's Evolutionary Model
3rd	Rowan Barnett	St John's Grammar School	Why do flowers and plants close overnight?
EA	Lily Bedford, Sophie Bedford	Glenunga International High School	Bacterial Cell Walls - Gram Positive Vs Gram Negative

Multimedia

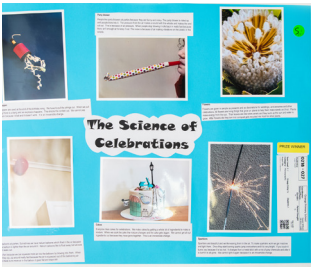
R–2			
1st	Patrik Porter	Coromandel Valley Primary School	The Science of Skiing
2nd	Mihika Gorey	Grange Primary School	The Science of Dalgona Coffee
3rd	Charlotte Atkinson	Virginia Primary School	Movement Magic
3–4			
1st	Jasmine Helwig	Highgate School	Water Cycle
2nd	Ethan Wass	Coromandel Valley Primary School	Mars
3rd	Abigail Atkinson	Virginia Primary School	Rat Race - The Movie
HC	Teng Shun Isaac Khoo	Highgate School	Which Lego Man will Melt First?

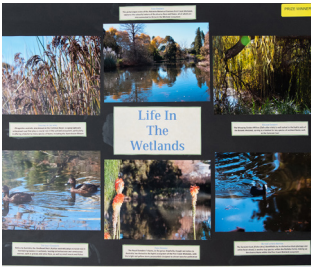
Multimedia continued

5–6			
1st	Scarlett Fisher	Aldgate Primary School	Bioluminescence
1st	Priyanka Thavarajah	Seymour College	What makes cakes fluffy?
HC	Heidi Melegh	St Thomas School	Does Subliminal Messaging Work?
HC	Indahla Rodosthenous, Rahini Phull, Mikaela Annicchiarico	Highgate School	The science behind homemade lava lamps
HC	Tilly Schammer	Hawthorndene Primary School	Solar News report about Pluto
7–8			
1st	Gabrielle Yoong, Kasia Klar, Alana Kneebone	Walford Anglican School for Girls	Viruses
2nd	Lucy Rice	Walford Anglican School for Girls	Save the Bees - Addressing Declining Bee Populations
3rd	Johanna Manlapas	Glenunga International High School	The Pendulum
Johanna Manlapas is also recipient of the Australian Institute of Physics (AIP) Prize for the most outstanding entry with a physics theme.			
EA	Jessica Humphry	Sacred Heart College	Test of Pain
EA	Caitlin Vass	Pembroke School	Animal Therapy: How Animals Affect Mental Health
9–10			
1st	Asira Suetrong	Glenunga International High School	The Endocrine System
2nd	Beth Worthley	Walford Anglican School for Girls	What is a non-Newtonian fluid?
3rd	Deamanthe Kassapis	Walford Anglican School for Girls	The development of a child in a womb
EA	Scarlett Minney, Matilda Alford	Walford Anglican School for Girls	Peacock Spiders
11–12			
1st	Josephine Oehler	Seymour College	Water in a Glass Test Tube - Adhesive vs Cohesive Forces

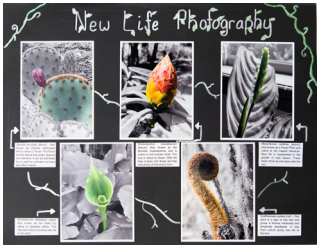
Photography

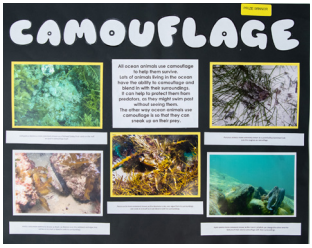
R–2			
1st	Zachary Summerton	Crafers Primary School	Sports Science
2nd	Alice Schammer	Hawthorndene Primary School	New life
3rd	Isaac Powell	Grange Primary School	Science of Celebrations
HC	Ginevra Betti	Annesley Junior School	New Life
HC	Vivienne Childs	Wilderness School	New Life
HC	Faye El-Sayed	St John's Grammar School	Life in the Wetlands
HC	Mikayla Erceg-Braid	Immanuel Primary School	Life in the Wetlands
HC	Natasha Koh, Charlotte Koh	St Andrew's School	New Life
HC	Aayan Kumaria	Rose Park Primary School	Life in the Wetlands
HC	Nitya Vishwasrao	Magill School	New Life
HC	Ma (Emma) Zuo	St Andrew's School	Camouflage
3–4			
1st	Joshua Clothier	Immanuel Primary School	New Life
2nd	Sullivan Koenig	Vale Park Primary School	Sports Science
3rd	Bonnie Cabot	St Andrew's School	Camouflage
HC	Isla Balestrin	Wilderness School	Life in the Wetlands
HC	Nathan Koh	St Peter's College	New Life
HC	Lachlan Laver, Brian Gribble, Curtis Tham	Scotch College	Camouflage
HC	Jarrah Skinner	Immanuel Primary School	Science of Celebrations
HC	Sebastian Trento	Immanuel Primary School	Camouflage - Colours of Nature





5–6			
1st	Violet Newell	Salisbury Park Primary School	Life in the Wetlands
2nd	Caitie Wroniak	Vale Park Primary School	New Life
3rd	Mia Luppino	Loreto College	New Life
HC	Olivia Bednarczuk	Colonel Light Gardens Primary School	Camouflage
HC	Ruby Gosnell	St Thomas School	Camouflage
HC	Zac Grice	Prince Alfred College - Prep	Sports Science
HC	Aazeen Haider	Mawson Lakes School	Camouflage
HC	Micaela Jaksa	St Thomas School	Sports Science
HC	Bella Walden, Madelyn Govan, Liv-Tillie Kereti	Kangaroo Island Community Education	Camouflage
HC	Hope Williamson, Isla Beaney	Grange Primary School	New Life



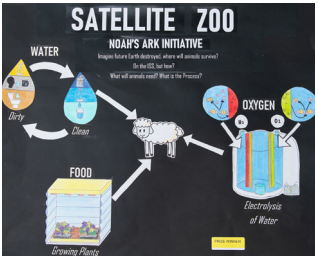


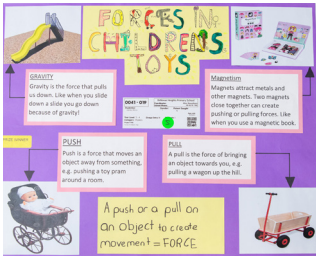
Photography continued

7–8			
1st	Callum Klein	Kangaroo Island Community Education	Life in the Wetlands
2nd	Summer Winwood	Concordia College	New Life
3rd	Coco Nelson	Mitcham Girls High School	Camouflage
EA	Isabel Brumfield, Isabelle Pirakis, Josie Hughes	Brighton Secondary School	Science of Celebrations
EA	Evie Desteno	St John's Grammar School	Camouflage
EA	Ruby Jenkins	Mitcham Girls High School	Life in the Wetlands
EA	Willem Koehne	St Andrew's School	Camouflage
EA	Sequoia Pitt	Mitcham Girls High School	Camouflage
EA	Abella Seaman	St John's Grammar School	Life in the Wetlands
EA	Mia Tonkin, Sara Birt, Zoe Quirk	Brighton Primary School	Sports Science
EA	Cynthia Zhao	Glenunga International High School	New Life
9–10			
1st	Kasimir Kellermann Williams	Glenunga International High School	Camouflage
2nd	Caitlin Wood	Eynesbury Senior College	Life in the Wetlands
3rd	Savin Dissanayake	Glenunga International High School	Life in the Wetlands
EA	Chelsea Adams	St John's Grammar School	Camouflage
EA	Isabel Bennett	St John's Grammar School	Sports Science
EA	Kymberly Croft, Lauren Voda, Tia Sierat	Prescott College Southern	Science of Celebrations
EA	Mia Drake	St John's Grammar School	Life in the Wetlands
11–12			
1st	Syme Aftab	Glenunga International High School	Life in the Wetlands
2nd	Isabelle Lilburn	Loreto College	Sports Science
3rd	Akshara Radhakrishnan, Anika Younus	Glenunga International High School	Life in the Wetlands

Posters

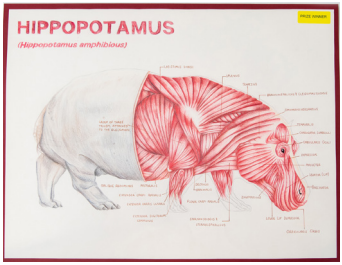
R–2			
1st	Joshua Low	Immanuel Primary School	The Science of Bushfires
2nd	Angus Christo	Rose Park Primary School	The Science of Bushfires
3rd	Mihika Gorey	Grange Primary School	The Science of Bushfires
3rd	Maryam Cedra Sawad	Wilderness School	The Science of Bushfires
HC	Ian Barreto	St Thomas School	The Science of Bushfires
HC	Elise Eddey	Coromandel Valley Primary School	Miniature World
HC	Elise Hyde	Annesley Junior School	Bush Foods
HC	Amelie Khodadin	Annesley Junior School	Bush Foods
HC	Phillip Mai	St Peter's College	Miniature World
3–4			
1st	Kishan Saha	Scotch College	Natural History Illustration
2nd	Jasmine Morris	Bellevue Heights Primary School	Forces in Children's Toys
3rd	Connor Wallace	Scotch College	The Science of Bushfires
HC	Penny Ahmed	Brighton Primary School	Miniature World
HC	Amelie Brady	Bellevue Heights Primary School	Natural History Illustration
HC	Benjamin Low	Immanuel Primary School	Miniature World
HC	Jessica Mah	Wilderness School	Bush Foods
HC	Mason Rijinbeek	Goolwa Primary School	Forces in Children's Toys

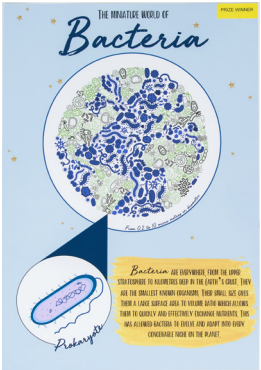




Posters continued

5–6			
1st	Isabella Spagnoletti	Loreto College	The Science of Bushfires
2nd	Kayla Talbot	St Thomas School	Bush Foods
3rd	Annika Ganesh	Wilderness School	Forces in Children's Toys
HC	Rashmi Adiga	Mawson Lakes School	The Science of Bushfires
HC	Skylar Farley	St Andrew's School	Forces in Children's Toys
HC	Madison Humphry	St Thomas School	The Science of Bushfires
7–8			
1st	Phoebe Wood	Aldgate Primary School	Natural History Illustration
2nd	Sarah Honter	Mitcham Girls High School	A Satellite Zoo
3rd	Grace Morgan	Kangaroo Island Community Education	The Science of Bushfires
EA	Julia Di Ciocco	St Aloysius College	Miniature World
EA	Zara Fisher	Concordia College	The Science of Bushfires
EA	Carson Huynh	East Torrens Primary School	The Science of Bushfires
EA	Ruby Murfitt	Mitcham Girls High School	Natural History Illustration
EA	Mika Ravell	St Aloysius College	Natural History Illustration
9–10			
1st	Yastika Choure	Brighton Secondary School	The Science of Bushfires
2nd	Tahlia Keegan	St John's Grammar School	The Science of Bushfires
3rd	Jess Williams	St John's Grammar School	Forces in Children's Toys
EA	Damian Lee	Brighton Secondary School	The Science of Bushfires
11–12			
1st	Isabelle Lilburn	Loreto College	Natural History Illustration
2nd	Madeleine Flapper	Loreto College	Miniature World
3rd	Josephine Oehler	Seymour College	Miniature World
EA	Josephine Oehler	Seymour College	Bush Foods





Science Writing

R–2			
1st	Ivan Leong	St Andrew's School	Climate Change; The Way Forward?
2nd	Anna Luo	St Andrew's School	Living on Mars
3rd	Jack Williams	Immanuel Primary School	Hidden Waves
HC	Rayan Khan	Prince Alfred College	Does Radiation Make Superheroes?
HC	Harry Waller	Willunga Primary School	Living on Mars
3–4			
1st	Chloe Lambden	Walkerville Primary School	Shirley the Short-Tailed Shearwater and the Polluted Ocean
2nd	Connor Wallace	Scotch College	Hidden Waves
3rd	Venuki Venara Kodithuwakku Arachchige	Mawson Lakes School	Climate Change; The Way Forward?
5–6			
1st	Krishna Neelam	Mawson Lakes School	Climate Change; The Way Forward?
2nd	Samarbir Singh	St Andrew's School	Living on Mars
3rd	Kara Heidrich	Annesley Junior School	Climate Change; The Way Forward?
HC	Amelia Downes	Salisbury Park Primary School	Hidden Waves
7–8			
1st	Twisha Srivastava	Glenunga International High School	Living on Mars
2nd	Dewwandi Wijekoon	Glenunga International High School	Deep Blue: Innovations for the Future of our Oceans
3rd	Niya Singhal	Wilderness School	Living on Mars
EA	Nathan Aftab	Rose Park Primary School	Climate Change; The Way Forward?
EA	Annalise Hayward	Walford Anglican School for Girls	Living on Mars
EA	Georgia Morton	Walford Anglican School for Girls	Does Radiation Make Superheroes?
EA	Kahlea Sweet	Mary MacKillop College	Does Radiation Make Superheroes?

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Science Writing continued

9-10			
1st	Matthew Lim	Pembroke School	Hidden Waves
2nd	Chengcheng Zheng	Wilderness School	Does Radiation Make Superheroes?
3rd	Vanessa Rapuano	Mary MacKillop College	Climate Change; The Way Forward?
EA	Annabelle Inaba-Hill	Walford Anglican School for Girls	Climate Change; The Way Forward?
EA	Oliver Manning	Concordia College	Hidden Waves
11–12			
1st	Sarah Edwards	Eynesbury Senior College	The Communication, Collaboration and Scientific Development of the CERN Large Hadron Collider
1st	Ashlee Fauser	Mitcham Girls High School	The Grey Wolf
3rd	Fai Chan	Wilderness School	Does Radiation Make Superheroes?
EA	Ailani Cox	St Peter's Collegiate Girls' School	The Organogenesis of Ectopic Tissue
EA	Kabisha Emad	Wilderness School	STEM cell rejuvenation
EA	Mai Nguyen	Glenunga International High School	Metal Organic Frameworks (MOFs) for Sustainable Hydrogen Fuel Production
EA	Josephine Oehler	Seymour College	Algae: the solution to climate change?
EA	Sahithya Paramasivan	Mitcham Girls High School	The Sea Otter Recovery

Scientific Inquiry

R–2			
1st	Hamish Buttfield	Norwood Primary School	What do other people feel about the Coronavirus?
2nd	Liam Hooper	Immanuel Primary School	Understanding Beyblades
3rd	Charlotte Atkinson	Virginia Primary School	Does exercise make my body warm up?
3–4			
1st	Arjun Betti	Norwood Primary School	Can you grow plants using recycled water from washing machines?
2nd	Abigail Atkinson	Virginia Primary School	Rat Race - The Investigation
3rd	Connor Wallace	Scotch College	Helping Our Creek
HC	Jacob Brumby	Stirling East Primary School	What happens to the height of the bounce of a basketball when you change the temperature of the ball?
HC	Dayan Govender	St Andrew's School	Air Flow Over an Aircraft Wing
5–6			
1st	Eugene Lee	Pedare Christian College	Dye Sensitised Solar Cell (DSSC)
2nd	Priyanka Thavarajah	Seymour College	Does increasing the concentration of Carbon Dioxide in the Atmosphere cause it to warm?
3rd	Cristina Parletto	Walford Anglican School for Girls	The effect of nuclear radiation on plant growth

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Scientific Inquiry continued

7–8			
1st	Sienna Hill	Our Lady of the Sacred Heart College	Starch Hydrolysis by Amylase and Detergent
Sienna Hill is also the recipient of the Australian Society for Biochemistry and Molecular Biology Prize for the most outstanding entry with a biochemistry or molecular biology theme.			
2nd	Emily Estcourt Hughes	Walford Anglican School for Girls	Mining water on Mars for sustainable human colonisation
3rd	Shanza Ismail	Norwood Primary School	The Quality of Drinking Water in South Australian Public Playgrounds
EA	Angela Leydon	Concordia College	Effect of SPF50+ sunscreen under different temperatures
9–10			
1st	Prathicksha Venkatesan	Walford Anglican School for Girls	The Effect of Curcumin and Bacteriophage on Multi-Drug Resistant Bacteria
2nd	Inika Weber, Trishna Ramkumar	Wilderness School	What is the best germination method for senecio macrocarpus
3rd	Sohana Pasula	Emmaus Christian College	To investigate the effect different dish soaps and fruits have on the extraction of DNA
11–12			
1st	Raihanah Pranggono	Glenunga International High School	Investigating the Effects of Disaccharides and Monosaccharides on the Rate of Respiration in Saccharomyces cerevisiae
Raihanah Pranggono is also the recipient of the Royal Australian Chemical Institute (RACI) Prize for the most outstanding entry with a chemistry theme.			
2nd	Yu (Amy) Shi	Glenunga International High School	Particulate black carbon and its contribution to the urban heat island effect
3rd	Isabelle Lilburn	Loreto College	Is the central route of persuasion more effective at changing at individual's attitude towards tobacco than the persuasive route?

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