

## Examinations: HSC Mid-Year, Trial and Year II

- Examinations follow all NSW Education Standards Authority (NESA) requirements and contain instructions, mapping grids, marking guidelines and sample answers.
- Mid-Year and Trial examinations are distributed by email. Examinations are subject to the following embargo periods: **Mid-Year exams** – Monday 5 March to Friday 30 March 2018; **Trial exams** – Monday 25 June to Monday 13 August 2018.
- QAT examinations are designed to be modified/edited as required.
- Past exam papers are also available for student revision and practice. (See web site)

## Internal Assessment Tasks

- Each internal Assessment Task directly relates to specific course requirements (including outcomes, components and task types). Each task is largely self-contained for immediate use with students.
- Clear instructions, source material and questions together with **solutions** for marking the task are provided.
- Tasks are distributed by email.

Please visit the QATs website at [www.qats.com.au](http://www.qats.com.au) for writers' details.

### Order form / Tax invoice

ABN 54232369681

Name: \_\_\_\_\_

School/institution: \_\_\_\_\_

Address: \_\_\_\_\_

Postcode: \_\_\_\_\_

EMAIL: \_\_\_\_\_

Phone: \_\_\_\_\_

**Total amount due (transfer from subtotals): \$** \_\_\_\_\_

**School cheque** (payable to QATs) enclosed;

or **School Order Number:** \_\_\_\_\_

### THIS FORM CAN BE FREEFAXED TO 1800 445 843

**Disclaimer.** Every effort has been made to prepare QATs in accordance with Board of Studies documents. No guarantee or warranty is made or implied that the tasks mirror in every respect the actual assessment requirements in any or all courses to be examined. These tasks do not constitute 'advice', nor can they be construed as authoritative interpretations of Board of Studies intentions. No liability for any reliance, use or purpose related to the QATs is taken. Advice on assessment issues is only to be obtained from the Board of Studies. QATs do not accept any responsibility for accuracy of results once modified.

Both the examinations and the internal assessment tasks:

- are delivered by email
- allow for electronic editing and modifying (for examinations)
- are reliable, accurate and reflect all current course requirements
- contain structures that reflect desired outcomes and marking bands
- are huge **time-savers**
- are **high quality** products
- have **sample answers** and clear marking guidelines.

**QATs are an initiative of Curriculum Australia**

### Release dates

#### Mid-Year

Available from  
Monday, 5 March 2018

#### Trial/Year 11

Available week beginning  
Monday, 25 June 2018

**Note: Embargo period applies**

# QATs

## Quality Assessment Tasks

**Your complete Science needs for**

- **Biology**
- **Physics**
- **Chemistry**
- **Senior Science**

- **HSC Mid-Year Exams**
- **HSC Trial Exams**
- **Year II Exams**
- **HSC Internal Assessment Tasks**

# QATs

# 2018

**Your Complete Assessment Needs**

### BIOLOGY

Item	Code	Task	Price (\$)	Order (✓)
<b>EXAMINATIONS - 2018</b>				
1	MIDBIOL18	<b>MID YEAR EXAM.</b> 2 hour paper. Topics covered: Maintaining a Balance; Blueprint of Life; Search for Better Health.	\$ 85	
2	TRBIOL18	<b>TRIAL EXAM.</b> 3 hour paper. Core modules plus options: Communication; Biotechnology; Genetics - The Code Broken?; The Human Story; Biochemistry.	\$ 110	
3	YR11BIOL18	<b>YEAR 11 EXAM.</b> 2 hour paper. All four modules covered: Cells as the Basis of Life; Organisation of Living Things; Biological Diversity; Ecosystem Dynamics.	\$ 65	
<b>PAST EXAMINATIONS - 2016/17</b>				
4	MIDBIOL16	<b>MID YEAR EXAM.</b> 2 hour HSC paper covering 3 core topics.	\$ 30	
5	TRBIOL16	<b>TRIAL EXAM.</b> 3 hour HSC paper with options.	\$ 35	
6	MIDBIOL17	<b>MIDYEAR EXAM.</b> 2 hour HSC paper covering 3 core topics.	\$ 35	
7	TRBIOL17	<b>TRIAL EXAM.</b> 3 hour HSC paper with options.	\$ 40	
<b>INTERNAL ASSESSMENT TASKS - Published 2015</b>				
8	Ser5BIO1	<b>Search for Better Health.</b> Research task: Water and disease.	\$ 20	
9	Ser5BIO2	<b>Search for Better Health.</b> Epidemiological case study for casual identification of a disease.	\$ 20	
10	Ser5BIO3	<b>Blueprint of Life.</b> Research task: Transgenic species.	\$ 20	
11	Ser5BIO4	<b>Maintaining a Balance.</b> Research task: Adaptations of Australian organisms.	\$ 20	
12	Ser5BIO5	<b>Maintaining a Balance.</b> Research task: Blood and donation.	\$ 20	
13	Ser5BIO6	<b>Option: Communication.</b> Case study: The Ear and Hearing.	\$ 22	

**SUBTOTAL A \$**

### CHEMISTRY

Item	Code	Task	Price (\$)	Order (✓)
<b>EXAMINATIONS - 2018</b>				
14	MIDCHEM18	<b>MID YEAR EXAM. Core only.</b> (Exam time 2 hours.)	\$ 75	
15	TRCHEM18A	<b>TRIAL EXAM. Core only.</b> (Modules 1, 2, 3) (2.25 hour paper.)	\$ 110	
16	TRCHEM18B	<b>TRIAL EXAM.</b> Core (Modules 1, 2 and 3) plus options: Industrial Chemistry; Shipwrecks, Corrosion and Conservation; Forensic Chemistry. (3 hour paper.)	\$ 125	
17	YR11CHEM18	<b>YEAR 11 EXAM.</b> All four modules covered. Properties and Structure of Matter; Intro. to Quantitative Chemistry; Reactive Chemistry; Drivers of Reactions. (2 hour paper.)	\$ 65	
<b>PAST EXAMINATIONS - 2016/17</b>				
18	MIDCHEM16	<b>MID YEAR EXAM.</b> 2 hour HSC paper. Core.	\$ 30	
19	TRCHEM16A	<b>TRIAL EXAM.</b> 2.25 hour HSC paper. Core.	\$ 40	
20	TRCHEM16B	<b>TRIAL EXAM.</b> 3 hour HSC paper. Core plus options.	\$ 40	
21	MIDCHEM17	<b>MID YEAR EXAM.</b> 2 hour HSC paper. Core.	\$ 45	
22	TRCHEM17A	<b>TRIAL EXAM.</b> 2.25 hour paper. Core.	\$ 50	
23	TRCHEM17B	<b>TRIAL EXAM.</b> 3 hour paper. Core plus options.	\$ 50	
<b>INTERNAL ASSESSMENT TASKS - Published 2015</b>				
24	Ser5CHEM1	<b>Production of Materials:</b> Research changes in the use of radioisotopes and complete an in-class report.	\$ 20	
25	Ser5CHEM2	<b>Production of Materials &amp; The Acidic Environment:</b> Plan and conduct first-hand investigations, related to the content of Cores 1 and 2, and complete a report.	\$ 20	
26	Ser5CHEM3	<b>Production of Materials, The Acidic Environment &amp; Chemical Monitoring and Management:</b> Analyse, interpret, process and evaluate data associated with firsthand investigations and secondary sources, related to all three Core units. Class test.	\$ 20	
27	Ser5CHEM4	<b>Option:</b> Research case studies of three processes associated with <b>Industrial Chemistry</b> and complete an in-class report.	\$ 20	
28	Ser5CHEM5	<b>Option:</b> Research case studies of three processes associated with <b>Shipwrecks, Corrosion and Conservation</b> and complete an in-class report.	\$ 20	
29	Ser5CHEM6	<b>Option:</b> Research case studies of three techniques associated with <b>Forensic Chemistry</b> and complete an in-class report.	\$ 20	

**SUBTOTAL B \$**

### PHYSICS

Item	Code	Task	Price (\$)	Order (✓)
<b>EXAMINATIONS</b>				
30	MIDPHY18	<b>MID YEAR EXAM.</b> 2 hour paper. Topics covered: Space, Motors and Generators, From Ideas to Implementation.	\$ 85	
31	TRPHY18A	<b>TRIAL EXAM.</b> Core only (Modules 1, 2, 3) (2.25 hour paper)	\$ 95	
32	TRPHY18B	<b>TRIAL EXAM.</b> Core plus options. (Medical Physics; Astrophysics; From Quanta to Quarks) (3 hour paper)	\$ 130	
33	YR11PH18	<b>YEAR 11 EXAM.</b> All four modules covered: Kinematics; Dynamics; Waves and Thermodynamics; Electricity and Magnetism. (2 hour paper)	\$ 65	
<b>PAST EXAMINATIONS</b>				
34	MIDPHY16	<b>MID YEAR EXAM.</b> 2 hour HSC paper. 3 core topics.	\$ 35	
35	TRPHY16	<b>TRIAL EXAM.</b> Core plus options. 3 hour paper – Medical physics, Astro, Q to Q.	\$ 35	
36	MIDPHY17	<b>MID YEAR EXAM.</b> 2 hour HSC paper. 3 core topics.	\$ 35	
37	TRPHY17A	<b>TRIAL EXAM.</b> Core only. 2.15 hour HSC paper.	\$ 40	
38	TRPHY17B	<b>TRIAL EXAM.</b> Core plus options. 3 hour HSC paper.	\$ 45	
<b>INTERNAL ASSESSMENT TASKS Published 2015</b>				
39	Ser5PHY1	<b>Space:</b> Determining the mass of an astronomical body (Jupiter) using Kepler's 3rd law.	\$ 20	
40	Ser5PHY2	<b>Motors &amp; Generators:</b> Build a DC electric motor from scratch with basic materials. Explain the principles behind how it works.	\$ 20	
41	Ser5PHY3	<b>Ideas to Implementation:</b> Complete a practical simulation assignment on the photoelectric effect using a simulation	\$ 20	
42	Ser5PHY4A	<b>Option:</b> Astrophysics - students plot a H-R diagram then classify the stars and outline their general characteristics.	\$ 20	
43	Ser5PHY4B	<b>Option:</b> Quanta to Quarks - investigation and presentation on the use of radioisotopes in medicine, agriculture, and engineering.	\$ 20	

**SUBTOTAL C \$**

### INVESTIGATING SCIENCE

Item	Code	Task	Price (\$)	Order (✓)
44	YR11IS18	<b>YEAR 11 EXAM.</b> 2 hour paper. All four modules covered: Cause and Effect - Observing; Cause and Effect - Inferences and Generalisations; Scientific Models; Theories and Laws.	\$ 65	
45	YR11ISDS	<b>DEPTH STUDIES:</b> The following two studies are available: 1) Cause and effect - Inferences and generalisations. Based on Module 2 2) "Scientific Models". Based on Module 3. For more details on the two Depth Studies, refer to the QATs site: <a href="http://www.qats.com.au">www.qats.com.au</a>	\$ 20 \$ 20	( ) ( )

**SUBTOTAL D \$**

### SENIOR SCIENCE

Item	Code	Task	Price (\$)	Order (✓)
<b>EXAMINATIONS - 2018</b>				
46	MIDSS18	<b>MID YEAR EXAM.</b> 2 hour paper. Topics: Lifestyle Chemistry, Medical Technology (Bionics), Information Systems.	\$ 75	
47	TRSS18	<b>TRIAL EXAM.</b> 3 hour paper. Topics: Lifestyle Chemistry, Medical Technology (Bionics), Information Systems. Plus options: Disasters; Space Science; Polymers; Pharmaceuticals; Preservatives and additives.	\$ 110	
<b>PAST EXAMINATIONS - SENIOR SCIENCE - 2016/17</b>				
48	MIDSS16	<b>MID YEAR EXAM.</b> 2 hour HSC paper.	\$ 30	
49	TRSS16	<b>TRIAL EXAM.</b> 3 hour HSC paper.	\$ 40	
50	MIDSS17	<b>MID YEAR EXAM.</b> 2 hour HSC paper.	\$ 35	
51	TRSS17	<b>TRIAL EXAM.</b> 3 hour HSC paper.	\$ 45	
<b>INTERNAL ASSESSMENT TASKS Published 2015 - SENIOR SCIENCE</b>				
52	Ser4SENSC1	<b>Lifestyle Chemistry.</b> Design and appropriate experiment to carry out and write up.	\$ 20	
53	Ser4SENSC2	<b>Medical Technology - Bionics</b> Assess information from various sources on non-invasive technology to establish the accuracy and reliability of the information presented.	\$ 20	
54	Ser4SENSC3	<b>Info. Technology.</b> Design and carry out an experiment linking the properties of waves.	\$ 20	
55	Ser4SENSC4	<b>Option: Disasters.</b> Research and orally present information regarding the roles of emergency services and how they work together.	\$ 20	

Transfer total to order form on reverse. Prices include GST.

**SUBTOTAL E \$**