

Year 10 Science - Biology

Work rate calendar (WRC) 2024

Term 1

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment				
Supervised assessment		Summative exams are to be supervised by the student's official exam supervisor.		
Non-supervised assessment		Students must sign declaration of academic integrity.		
Week	Dates	Unit	Topic	Class work (refer to Learning Sequence in QLearn)/ Assessment to be submitted
1	22 Jan – 26 Jan	Unit Biology	Orientation Familiarise with expectations and resources for Science Monday 22 January — Welcome calls for students: Prep – Year 12 Wednesday 24 January — Learning for success: Prep – Year 12 Friday 26 January — Australia Day Holiday	
2	29 Jan – 2 Feb		DNA and genes What can be inherited? Genes in DNA contain the genetic code for all inherited traits (optional) Practical demo (video): Extract DNA The genome is cut into chromosomes each including many genes	Supervisor Safety Declaration signed and uploaded to QLearn
3	5 Feb – 9 Feb		Alleles Mutation Alleles on chromosomes Mitosis Friday 9 February — Senior orientation day: Years 10–12	
4	12 Feb – 16 Feb		Genetic manipulation Selective breeding Genetic manipulation techniques SA1 Research Skills	Biology progress Quiz (QLearn)
5	19 Feb – 23 Feb		SA1 Planning Class time: SA1 proposal	SA1: Proposal
6	26 Feb – 1 Mar		Chromosome assortment Sexual vs Asexual reproduction Meiosis Inheritance/Punnett squares	
7	4 Mar – 8 Mar		SA1 Draft Pedigree diagrams <ul style="list-style-type: none"> SA1 draf 	SA1 draft
8	11 Mar – 15 Mar		Chromosome sorting Sex linked traits Practical: Drosophila Natural selection	Practical drosophila
9	18 Mar – 22 Mar		SA1 Report Practical: rabbit selection <ul style="list-style-type: none"> SA1 Final report 	Practical Rabbit selection SA1: Report (final)
10	25 Mar – 29 Mar		Evolution Evidence for evolution Microevolution Thursday 28 March — Cross country / Fun run: Prep – Year 12 Friday 29 March — Good Friday	

Disclaimer: Information contained in this document is correct at time of publishing.

LEGEND	Class work — send-in	Summative assessment	Exam block	School events	Public holidays	Student free day
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Year 10 Science - Chemistry

Work rate calendar (WRC) 2024

Term 2

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment	
Supervised assessment	Summative exams are to be supervised by the student's official exam supervisor.
Non-supervised assessment	Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work (refer to Learning Sequence in QLearn)/ Assessment to be submitted
1	15 Apr – 19 Apr	Unit Chemistry	Atoms, elements, and the periodic table Investigate the structure of atoms and their organisation into the periodic table of elements.	
2	22 Apr – 26 Apr		Thursday 25 April — Anzac Day Electron configurations and ions Investigate ions and the bonds they can form.	
3	29 Apr – 3 May		Periodic Trends Investigate the trends in chemical properties found across the elements of the periodic table.	
4	6 May – 10 May		Monday 6 May — Labour Day Types of chemical reactions Investigate chemical change as described by chemical reactions.	Chemistry Quiz
5	13 May – 17 May		Conservation of mass and balancing equations Investigate the law of conservation of mass.	
6	20 May – 24 May		Rate of reaction Investigate the rate of chemical reactions.	SA2 Practice Data test Complete in QLearn
7	27 May – 31 May		SA2 Data Test Complete assessment in QLearn.	SA2 Data Test Complete in QLearn
8	3 Jun – 7 Jun		Mandatory Practical 3 – Reaction Rate Conduct a given student experiment and write up the results in a report.	
9	10 Jun – 14 Jun		Mandatory Practical 4- Reaction Rate Modified Plan and conduct a modified student experiment.	
10	17 Jun – 21 Jun		Friday 21 June — Athletics carnival / Sports day: Prep – Year 12 Mandatory Practical - Reaction Rate Modified Plan and conduct a modified student experiment.	Student experiment

Year 10 Science: Physics

Work rate calendar (WRC) 2024

Term 3

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

Teachers may adjust topics, class work, assessment and submission dates. Adjustments will be communicated via QLearn or during lessons.

Assessment

Supervised assessment Summative exams are to be supervised by the student's official exam supervisor.

Non-supervised assessment Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work (refer to Learning Sequence in QLearn) / Assessment to be submitted
1	8 Jul – 12 Jul	Unit Physics	Introduction to energy Forces, energy, energy transfers, and energy transformations	
2	15 Jul – 19 Jul		Wednesday 24 July – Friday 26 July — SET plan meetings: Year 10 Speed and Velocity Explore the concepts of speed and velocity.	
3	22 Jul – 26 Jul		Mandatory Practical 5 - Speed Conduct a given student experiment and write up the results in a report.	
4	29 Jul – 2 Aug		Kinetic and gravitational potential energy Investigate kinetic and gravitational potential energy.	Physics Quiz
5	5 Aug – 9 Aug		Acceleration Investigate the acceleration of objects.	
6	12 Aug – 16 Aug		Wednesday 14 August — Royal Queensland (Ekka) Show Holiday Mandatory Practical 6 – Speed Modified (SA3_Student_Experiment) Plan and conduct a modified student experiment	
7	19 Aug – 23 Aug		Mandatory Practical 6 – Speed Modified (SA3_Student_Experiment) Plan and conduct a modified student experiment.	SA3 Student Experiment Draft
8	26 Aug – 30 Aug		Friday 30 August — Student free day Newton's first and second laws of motion Investigate Newton's first and second laws of motion.	
9	2 Sept – 6 Sept		SA3_Student_Experiment Final drafting and submission Complete assessment in QLearn. Complete assessment in QLearn	SA3 Student Experiment - Final Due
10	9 Sept – 13 Sept		Wednesday 11 September — Connect excursion: Years 7–9 Friday 13 September — Connect excursion: Years 10–12 Sound Elements Newton's third law Investigate Newton's 3rd law of motion.	

Year 10: Earth Science

Work rate calendar (WRC) 2024

Term 4

All students are expected to participate in all online lessons and complete all assessment as outlined in this **Work rate calendar**.

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Assessment

Supervised assessment Summative exams are to be supervised by the student's official exam supervisor.

Non-supervised assessment Students must sign declaration of academic integrity.

Week	Dates	Unit	Topic	Class work (refer to Learning Sequence in QLearn) / Assessment to be submitted
1	30 Sept – 4 Oct	Unit 4: Earth Science	Global Systems Investigate and define Earth's four main global systems: The Geosphere, Hydrosphere, Atmosphere and the Biosphere	
2	7 Oct – 11 Oct		Monday 7 October — King's Birthday Holiday Energy and Ecosystems Investigate ecosystems and how energy flows through the Biosphere	
3	14 Oct – 18 Oct		Monday 14 October – Wednesday 16 October — School camp: Years 9–10 The Carbon Cycle and The Greenhouse Effect Investigate the Earth's Carbon Cycle, and the Greenhouse effect	
4	21 Oct – 25 Oct		Climate Change and Global Warming Investigate the Earth's Climate Changes and the effect of Global warming	Earth Science Quiz
5	28 Oct – 1 Nov		The Scientific Beginning – The "Big Bang" Theory Investigate the "Big Bang" theory, as the theoretical scientific explanation for the origin of the universe	
6	4 Nov – 8 Nov		The Life Cycle of Stars Investigate the life cycle of stars	SA4 Practice exam Complete in QLearn
7	11 Nov – 15 Nov		SA4 Exam Complete the SA4 assessment in QLearn.	SA4 Exam Complete in QLearn
8	18 Nov – 22 Nov		Friday 22 November — Aquatic carnival: Prep – Year 11 Friday 22 November — Final day: Years 10–11 The Sun and Beyond Investigate the Sun, model ecosystems and the concept of "Terraforming an Exoplanet"	
9	25 Nov – 29 Nov			
10	2 Dec – 6 Dec			
11	9 Dec – 13 Dec			