

THE **ANSWER** SERIES

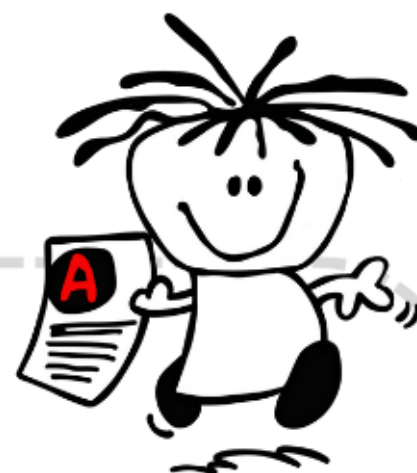
ATP & LESSON PLANNER

CONTENT, TRACKER & RESOURCES

GRADE

9

Natural Sciences



A **one-stop-teaching-tool** created by combining:

- the official DBE ATP
- The **Answer Series** Natural Sciences Class Text & Study Guide
- **TAS** resources
- curated online resources
- shared resources from our **TAS** WhatsApp Teacher Community

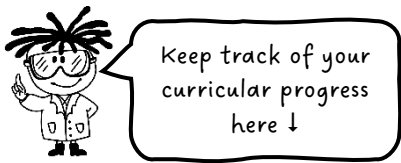
2026



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ACADEMIC WEEKS	CAPS TOPIC	CORE CONTENT & PAGE NUMBERS		SUGGESTED EXERCISES	POSSIBLE PRACTICAL TASKS / CONSOLIDATION	DATE CONTENT WAS COMPLETED
		<i>Based on The Answer Series Gr 9 Natural Sciences Class Text & Study Guide</i>				
WEEK 1 14 – 16 Jan	Scientific Method 3 school days	Scientific Investigation	p. iii – vii	- Work through the ‘Worked Example of a Scientific Investigation Question’ with learners on p. vii – viii		
		Representing data: Tables and graphs	p. ix – xii	- Use these resources from our webinar to teach scientific investigations		
WEEK 2 & 3 19 – 30 Jan Lesson plan 1 Lesplan 1 Lesson plan 2 Lesplan 2	Cells as the basic units of life 10 school days 22% of term test on all topics*	Cells – structural and functional units	p. 2		Watch this useful introductory video to cells	
		Components of plant and animal cells	p. 3 – 5	p. 64: Q2 & 3	Watch this useful video	
		Differences between plant and animal cells	p. 6	p. 64: Q4	Amazing 3D model of cells to explore, add/remove organelles here	
		Cells in tissues, organs and systems – cell adaptations	p. 7			
		Unicellular vs Multicellular	p. 8			
		Organisation of cells	p. 8	p. 66: Q7	Light Microscope & Mounting Specimens p. 11 – 13 (PRAC)	
		Microscopy and The Light Microscope	p. 9 – 13	p. 65: Q5; p. 66: Q8	Virtual microscope – use microscope and view different cells here	
		Stem cells	p. 13 – 14	p. 63: Q1; p. 65: Q6	Consolidation activity here	
WEEK 4 2 – 6 Feb	Overview of Systems 5 school days 12% of term test on all topics*	Main body systems	p. 15			
		Musculoskeletal system – overview and purpose	p. 23 – 25	p. 71: Q14	Revision exercises: ENG & AFR MEMO ; Interactive skeleton here	
		Excretory system – overview and purpose	p. 25 – 28	p. 72: Q15	Revision exercises: ENG & AFR MEMO ; Self-marking quiz here	
		Nervous system – overview and purpose	p. 28 – 31	p. 74: Q16	Revision exercises: ENG & AFR MEMO	
WEEK 5 & 6 9 – 20 Feb Lesson plan Lesplan	Circulatory & Respiratory System 10 school days 22% of term test on all topics*	Circulatory system – main processes and components	p. 18 – 19		- Colour in pages: blood heart external heart internal	
		The Heart & blood vessels	p. 45 – 49	p. 86: Q24.1 & 24.2	- Heart dissection p. 47 (PRAC)	
		Circulation	p. 49	p. 86: Q24.3 – 24.7	- Watch these useful videos: Overview 1 and Overview 2	
		Benefits of exercise on the cardiovascular system	p. 51	p. 87: Q24.8	Effect of exercise on heart rate p. 50 (PRAC)	
		Cardiovascular system health concerns	p. 20 & 56		- Heart & pulse rate (PRAC): ENG AFR MEMO	
		Respiratory system overview & structure	p. 21, 51 – 52		- Revision exercise circulatory system: ENG & AFR MEMO	
		Breathing	p. 52 – 53	p. 84: Q23.2 – 23.4	Lung dissection (PRAC)	
		Gaseous exchange	p. 53 – 55	p. 83: Q23.1	- Self-marking quiz: ENG AFR	
		Respiration	p. 55	p. 70: Q13; p. 85: Q23.5 – 23.7; p. 88: Q24.10	- Watch this useful video for revision/overview	
		Respiratory system health concerns	p. 22 & 56	p. 69: Q12; p. 82: Q22; p. 88: Q24.9	Revision exercise respiratory system: ENG & AFR MEMO	
WEEK 7 & 8 23 Feb – 6 Mar Lesson plan Lesplan	Human Reproductive System 10 school days 22% of term test on all topics*	Purpose of reproduction	p. 35			
		Puberty	p. 36	p. 77: Q19		
		Reproductive organs – male & sperm cell structure	p. 33, 37 – 38	p. 76: Q17.3; p. 78: Q20.2	Revision exercise ENG/AFR: here	
		Reproductive organs – female & ovum structure	p. 33, 38 – 39	p. 76: Q17.2; p. 78: Q20.1	Revision exercise ENG/AFR: here	
		Overview of main processes	p. 31 – 32	p. 75: Q17.1		
		Stages of reproduction – menstrual cycle	p. 40		Watch this useful video; Revision exercise here	
		Stages of reproduction – copulation & fertilisation	p. 41		Watch this useful video	
		Stages of reproduction – implantation & pregnancy	p. 41 – 42	p. 79: Q21.1 & 21.2	Revision exercises ENG/AFR: here and here	
		Health concerns	p. 33	p. 81: Q21.6		
		Effects of alcohol, smoking and drug abuse on the foetus	p. 34 & 43	p. 76: Q17.4		
		Contraception, abortion, infertility and surrogacy	p. 44 – 45	p. 77: Q18; p. 81: Q21.7		
WEEK 9 & 10 9 – 20 Mar Lesson plan Lesplan	Digestive System 10 school days 22% of term test on all topics*	Digestive system overview	p. 16 – 17			
		Healthy diet – components of a healthy diet	p. 57 – 58	p. 90: Q26.1	Food test p. 58 (PRAC)	
		Malnutrition & diets from different cultures	p. 59	p. 90: Q26.2	Nutrition Task : ENG AFR MEMO	
		Alimentary canal – structures and functions	p. 60 – 62	p. 90: Q27.1; p. 91: Q27.3 – 27.5	Watch this useful video	
		Types of digestion	p. 62 – 63	p. 91: Q27.2; p. 92: Q27.5 – 27.7	Revision exercise: ENG AFR MEMO	
		Health issues	p. 17	p. 67: Q9; p. 68: Q10 & 11; p. 89: Q25	Reading food labels Task : ENG AFR MEMO	
WEEK 11 23 – 27 Mar	Time for consolidation and revision – TERM 1 REVISION ENG AFR MEMO			Formal assessments: TASK 1 – Practical (min 20) TASK 2 – Test (min 30)		

*Calculated based on teaching time in weeks divided by total teaching time for all topics, e.g. Digestive system = 2/9 x 100 = 22% ; not factoring in Scientific Method in week 1



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		Based on The Answer Series Gr 9 Natural Sciences Class Text & Study Guide				
WEEK 1 8 – 10 April Lesson plan Lesplan	Compounds <i>3 school days</i> 13% of term test on all topics*	Revise Grade 8 knowledge	p. 94		- Download and/or study the Periodic Table in various forms AND interactive game here - Periodic Table (high res) download with pictures and/or words here - Watch Video #1 The building blocks of matter @the_answer_series - Download MANY free worksheets with memos on naming compounds here - Interactive / self-marking exercise on Names & Formulas here - Simple idea for an activity to build molecules here	
		The Periodic Table of Elements: arrangement of elements; classifying elements (metals, semi-metals & non-metals); first 20 elements	p. 95 – 97	p. 122/123: Q1 – Q3		
		Names of compounds	p. 98 –99	p. 123/124: Q4 – Q9		
WEEK 2 13 – 17 April Lesson plan 1 Lesplan 1 Lesson plan 2 Lesplan 2	Chemical Reactions <i>5 school days</i> 12% of term test on all topics*	Introduction	p. 99			
		Chemical equations to represent reactions	p. 100	p. 124: Q10 – 13	- Watch a short video on how to teach balancing equations: AFR ENG - Balancing chemical equations interactive activity here - Download MANY free worksheets with memos on writing word equations here - Download MANY free worksheets with memos on balancing chemical equations here - Worksheet on balancing equations here	
		Balanced equations	p. 100 – 102	p. 125: Q14 – Q16		
WEEK 3 & 4 20 – 30 April Lesson plan Lesplan	Reaction of Metals with Oxygen <i>8 school days</i> 25% of term test on all topics*	General reaction: metals with oxygen	p. 102 – 103		 NOTE Not all shared resources are TAS creations – some are shared contributions from our Teacher WhatsApp group. Watch this useful video	
		Reaction of iron with oxygen	p. 103 – 104	p. 125: Q17; p. 126: Q21		
		Reaction of magnesium with oxygen	p. 104 – 105	p. 125: Q18 – Q20		
		Formation of rust	p. 105	p. 126: Q22		
		Ways to prevent rusting	p. 106 – 107	p. 126: Q23		Watch this video on the cost of corrosion (application to real life)
WEEK 5 4 – 8 May Lesson plan Lesplan	Reaction of Non-metals with Oxygen <i>5 school days</i> 13% of term test on all topics*	General reaction: non-metals with oxygen	p. 107	p. 126: Q24	- Watch this video on the reaction of non-metals with oxygen, then watch this video on the reaction of metals with oxygen to compare - Practical on the reactions of metals and non-metals with oxygen: ENG & MEMO AFR & MEMO - Download a poster of the different flame colours for your classroom here - Find more resources like the worksheets provided here	
		Reaction of carbon with oxygen	p. 107 – 108	p. 127: Q25		
		Reaction of sulphur with oxygen	p. 108 – 109	p. 127: Q26		
WEEK 6 11 – 15 May Lesson plan Lesplan	Acids, Bases & pH value <i>5 school days</i> 12% of term test on all topics*	Introduction	p. 109		- Interactive pH scale: basics activity here - Make your own universal indicator with red cabbage – see how here	
		Concept of pH value	p. 109 – 110	p. 127: Q27 & Q28	Interactive pH scale activity here	
		Indicators	p. 110 – 112	p. 127: Q29	- Testing household substances p. 111 (PRAC): Worksheet ENG & MEMO AFR & MEMO - Download posters: different pH indicators & red cabbage indicator's colour changes	
		Neutralisation and pH	p. 112 – 114	p. 128: Q30 – Q34	Neutralising vinegar and bicarbonate of soda p. 113 (PRAC), Worksheet: ENG & MEMO	
WEEK 7 & 8 18 – 29 May Lesson plan 1 Lesplan 1 Lesson plan 2 Lesplan 2	Reactions of Acids with Bases <i>10 school days</i> 25% of term test on all topics*	General reaction: acid with a metal oxide	p. 114 – 115	p. 129: Q35	Observe the reaction between an acid and an oxide p.115 (PRAC)	
		The pH of non-metal oxide solutions	p. 116			
		General reaction: acid with a metal hydroxide	p. 116 – 118		Preparation of a salt p. 117 (PRAC)	
		General reaction: acid with a metal carbonate	p. 118 – 120	p. 129/130: Q36 – Q43	Test the gas released during the reaction between an acid and a carbonate p. 118 (PRAC)	
		Applications of reactions of acids with bases	p. 120	p. 131: Q44 & Q45		
		General reaction: acid with a metal	p. 120 – 122	p. 131: Q46 & Q47	Test the gas released during the reaction between an acid and a metal p. 121 (PRAC)	
WEEK 9 – 12 1 – 26 June	Time for consolidation and revision – TERM 2 REVISION ENG & MEMO AFR & MEMO				Formal assessments: TASK 3 – Practical (min 20) TASK 4 – Test (min 30)	

*Calculated based on teaching time in weeks divided by total teaching time for all topics, e.g. Compounds = 1/8 x 100 = 13%



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		Based on The Answer Series Gr 9 Natural Sciences Class Text & Study Guide				
WEEK 1 – 2 21– 31 Jul Lesson plan Lesplan	Forces 9 school days 22% of term test on all topics*	What is a force?	p. 133			
		Measuring force	p. 133 – 135	p. 181: Q1	Investigate the effect of push and pull forces (PRAC) p. 134	
		Forces work in pairs	p. 135 – 136	p. 181: Q2 & Q3; p. 182: Q6	Investigate the size and direction of a pair of forces (PRAC) p. 135	
		Balanced and unbalanced forces	p. 136 – 138	p. 182: Q4 & Q5	Investigate the combined effect of forces (PRAC) p. 136	
		Contact forces and field forces	p. 139 – 140		Use this simulation to investigate forces and motion	
		Field forces: Gravitational force, mass and weight	p. 140 – 144	p. 182/183: Q7 – Q12	- Investigate the effect of gravity on a falling object (PRAC) p. 142 - Investigate the relationship between mass and weight (PRAC) p. 143	
		Field forces: Magnetic force, magnetic poles and magnetic fields	p. 144 – 148	p. 184: Q13 – Q15 p. 185: Q16 – Q18	- Distinguish between magnetic and non-magnetic materials (PRAC) p. 144 - Screening a magnetic field (PRAC) p. 145 - Investigate magnetic forces (PRAC) p. 147 - Investigate magnetic fields (PRAC) p. 148	
(½) WEEK 3 3 – 5 Aug Lesson plan Lesplan	Electric Cells as Energy Systems 3 school days 6% of term test on all topics*	Field forces: Electrostatic force, positive and negative charges, charging objects by friction, electrostatic force and the charging of thunder clouds: lightning	p. 149 – 152	p. 186/187: Q19 – Q24	- Investigate electrostatic forces (PRAC) p. 150 - Investigate magnetic fields (PRAC) p. 148	
		A cell is a chemical system	p. 152	NOTE Questions are suggested according to when learners will be able to do them.	How batteries work: watch here	
		A cell is a source of electricity	p. 153			
(½) WEEK 3 & WEEK 4 6 – 14 Aug Lesson plan Lesplan	Resistance 6 school days 17% of term test on all topics*	A battery is a group of cells	p. 153 – 155	p. 188: Q25 – Q27	Investigate electric cells (PRAC A and B) p. 154	
		Uses of resistors – conductors of electricity	p. 155 – 156			
		Resistance	p. 156 – 157		Simulate resistance in a wire here	
WEEK 5 & 6 17 – 28 Aug Lesson plan Lesplan	Series and Parallel Circuits 10 school days 22% of term test on all topics*	Factors that affect resistance – type, length, thickness and temperature of the conductor	p. 157 – 160	p. 189: Q28 – Q30	Investigate the factors that influence the resistance of a metal conductor (PRAC A to C) p. 158	
		Important circuit concepts	p. 160 – 161	p. 190: Q31 & Q32		
		Series circuits	p. 161		Construct circuits using this interactive simulation	
		Cells in series	p. 162		- Investigate cells in series (PRAC) p. 162 - Investigate resistors in series (PRAC) p. 163	
		Parallel circuits	p. 164			
		Resistors in parallel	p. 164		- Investigate cells in parallel (PRAC) p. 164 - Investigate resistors in parallel (PRAC) p. 165	
		Compare series and parallel circuits	p. 166 – 167	p. 190: Q33		
		Lighting systems in our homes	p. 167		Investigate lighting systems in our homes (PRAC) p. 167	
		Resistors manufactured with an accurate resistance	p. 168			
		Relationship between V, I and R	p. 168	p. 191/192: Q34 – Q36	Use this interactive simulation to teach Ohm’s Law	
		Wiring in houses	p. 169 – 170		Interactive game – test learner knowledge on circuit connections here	



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(½) WEEK 7 31 Aug – 2 Sept Lesson plan Lesplan	Safety with electricity 3 school days 6% of term test on all topics*	Safety practices – overload	p. 170			
		Fuses, circuit breakers and earth leakage systems	p. 170			
		Three-pin plugs	p. 171 – 172	p. 193: Q37	- Investigate the three-pin plug of an electrical appliance (PRAC) p. 171 - Interactively label a three-pin plug here	
		Illegal electrical connections	p. 172 – 173			
(½) WEEK 7 & (½) WEEK 8 3 – 9 Sept Lesson plan Lesplan	Energy and the National Electricity Grid 5 school days 10% of term test on all topics*	Electricity generation – coal and other types of power stations	p. 173		Power stations and the national grid – watch here	
		The functioning of a power station	p. 173 – 174			
		Disadvantages of fossil fuels	p. 174			
		Alternative sources of energy: wind, hydroelectric, tidal and wave and solar	p. 174 – 176	p. 194: Q39 & Q40	- How do solar panels work? Video here - How do wind turbines work? Video here	
		Nuclear power in South Africa – radioactive fuel	p. 176 – 177			
		Operation of a nuclear power station	p. 177		How do nuclear power plants work? Video here	
		Radioactivity and nuclear waste	p. 177	p. 194: Q41		
		National electricity grid – interactive system	p. 177 – 179			
(½) WEEK 8 & WEEK 9 10 – 18 Sept	Cost of Electrical Power 7 school days 17% of term test on all topics*	Electrical power	p. 179		What is a kilowatt hour? Watch here	
		Power ratings (energy consumption)	p. 179			
		Consumer cost	p. 180		How much electricity does it take to power the world? Watch here	
		Saving electricity	p. 180	p. 195: Q42		
WEEK 10 21 – 23 Sept	Time for consolidation and revision – TERM 3 REVISION ENG & MEMO AFR & MEMO			Formal assessments: TASK 5 – Project (any content from Term 1 to 4 @ min 30 marks) TASK 6 – Test (Term 3 content only @ min 30 marks)		

*Calculated based on teaching time in weeks divided by total teaching time for all topics, e.g. Forces = 2/9 x 100 = 22%

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		<i>Based on The Answer Series Gr 9 Natural Sciences Class Text & Study Guide</i>				
WEEK 1 6 – 9 Oct Lesson plan Lesplan	The earth as a system 4 school days	The earth as a system – introduction	p. 197			
		Spheres of the earth – lithosphere, hydrosphere, atmosphere and biosphere	p. 197 – 198	p. 222: Q1 & Q2		
		Interactions between the spheres	p. 198 – 199	p. 222/223: Q3 – Q5		
WEEK 2 & (½) WEEK 3 12 – 21 Oct Lesson plan Lesplan	Lithosphere 8 school days	Structure of the earth	p. 199 – 200		Watch this video on the structure of the earth	
		Structure of the lithosphere	p. 200	p. 224: Q8	Watch this useful video	
		Minerals in the crust of the lithosphere	p. 200	p. 223: Q7		
		Rocks of the lithosphere	p. 201	p. 224: Q9	Watch this useful video on the minerals and rocks of the lithosphere	
		The rock cycle	p. 201 – 204	p. 223: Q6; p. 224/225: Q10 – Q11	Watch this useful video on the rock cycle	
(½) WEEK 3 & WEEK 4 22 – 30 Oct Lesson plan Lesplan	Mining of mineral resources 7 school days	Mining of mineral resources – introduction	p. 204		 NOTE Not all shared resources are TAS creations – some are shared contributions from our Teacher WhatsApp group.	
		Extracting ores	p. 204 – 206	p. 226: Q13 & Q14		
		Refining minerals	p. 206 – 207	p. 226/227: Q15 – Q16		
		Mining in South Africa	p. 207 – 210	p. 225: Q12; p. 227/228: Q17 – Q20		
WEEK 5 & (½) WEEK 6 2 – 10 Nov	Atmosphere 7 school days	Atmosphere – gases and layers	p. 210 – 212		Here is a printable scaled image of the earth’s atmosphere layers	
		Troposphere	p. 212			
		Stratosphere	p. 212 – 213			
		Mesosphere	p. 213			
		Thermosphere	p. 213 – 214	p. 230: Q22 & Q23	- Use this simulation to study the greenhouse effect – select ‘WAVES’ - Watch this video about ‘Everything you need to know about Earth’	
		The greenhouse effect	p. 214 – 217	p. 229: Q21; p. 231: Q24		
(½) WEEK 6 11 – 13 Nov	Birth, life and death of a star 3 school days	Introduction	p. 217			
		The birth of a star	p. 218		- Watch how a star is born here	
		The life of a star	p. 218 – 219		- Watch ‘The life cycle of stars’ here	
		The death of a star	p. 219 – 221	p. 232: Q25 & Q26	- Journey through an exploded star here - Practice Nov Exam: ENG & MEMO AFR & MEMO	
WEEK 7 – 11 16 Nov – 9 Dec	Final Exams	Formal assessments: TASK 7 – Exam (60% Term 3 content and 40% Term 4 content @ min 60 marks)				



NOTE

- The final exam must cover TERM 3 and 4 content.
- The content of TERM 3 must be equivalent to 60% of the paper.
- The content of TERM 4 must be equivalent to 40% of the paper.
- Also, remember to calculate the % weighting for each topic, based on the amount of teaching time to ensure that the content is not over/under assessed.
- The accompanying table shows an **example** for the mark allocation per topic if the exam were out of 100 marks.

	TOPIC	% of paper	ATP teaching time	Mark allocation $\frac{\text{teaching weeks}}{\text{total weeks}} \times \text{number of marks}$
TERM 3	Forces	60% of the paper i.e. 60 marks	2 weeks	± 13 marks
	Electric cells and Energy Systems		0.5 week	± 4 marks
	Resistance		1.5 weeks	± 10 marks
	Series and Parallel Circuits		2 weeks	± 13 marks
	Safety with Electricity		0.5 week	± 4 marks
	Energy and the National Electricity Grid		1 week	± 7 marks
	Cost of Electrical Power		1.5 weeks	± 10 marks
	TOTAL:		9 weeks	
TERM 4	The Earth as a System	40% of the paper i.e. 40 marks	1 week	± 7 marks
	Lithosphere		1.5 weeks	± 10 marks
	Mining of Mineral Resources		1.5 weeks	± 10 marks
	Atmosphere		1.5 weeks	± 10 marks
	Birth, Life and Death of a Star		0.5 week	± 3 marks
	TOTAL:		6 weeks	

$\frac{2}{9} \times 60$