## YEAR 9 SCIENCE WORK PLAN: Semester 2, 2017- Mr Polkinghorne, Mrs Jennings, Mr Moore



UNIT	TERM 1 TOPICS	ASSESSMENT	DUE DATE
Chemical Reactions Ch's 7 & 8	Matter (3 Weeks) 7.1: The history of the atom 7.2: Atoms are made of sub-atomic particles 7.3: Atoms have mass 7.4: Electrons are arranged in shells 7.5: Ions have more or less electrons 7.6: isotopes have more or less neutrons 7.7 Isotopes can release alpha, beta or gamma radiation 7.8The half-life of isotopes can be used to tell the time 7.9 Radiation is used in medicine Experiments pp 217-221 (7.1c, 7.2A, 7.2B, 7.4, 7.6c, 7.7c,7.8c)  Chemical Reactions (5 Weeks) 8.1: Mass is conserved in a chemical reaction 8.2: The rearrangement of atoms in a chemical reaction can be shown using a balanced chemical equation 8.4: Acids have a low pH. Bases have high pH. 8.5:Acids can neutralise bases 8.6: Acids react with metals to produce hydrogen and a salt 8.7: Oxidation reactions use oxygen to form new products 8.8: Combustion reactions need fuel and oxygen to produce carbon dioxide and water 8.9: Fuels are essential to Australian society. Experiments pp 222-228 (8.1, 8.2c,8.3, 8.4,8.5, 8.6, 8.7)	Task 5 – Practical Report Understanding & Skills  Task 6- Supervised Assessment Understanding and Skills	Hand out: Week 3 Tue 25th July 9ABCD Due: Week 4 Tues 1st Aug 9AC Wed 2nd Aug 9BD  Week 10 9A Parts A & B Tues 12/9 9B Mon 11 Pt A, Weds 13 Pt B. 9C Mon 11 Pt A, Tues 12 Pt B. 9D Wed 13 Pt A, Thurs 14 Pt B
UNIT	TERM 2 TOPICS	ASSESSMENT	DUE DATE
The Changing Earth – Big Systems Ch 6	Tectonic Plates (4 weeks) 6.1: Is the Earth shrinking or moving? 6.2: The Earth has a solid core. 6.3: Boundaries between the tectonic plates can be convergent, divergent or transform 6.4: Tectonic plates can be constructive or destructive. 6.5: What will the Earth look like in the future?  Experiments pp 217-221 (6.1Ac,6.1Bc,6.2,6.2c, 6.3c,6.4)  Climate Science (3 weeks)  – our atmosphere, the carbon cycle, is climate changing, Greenhouse effect, human influences, oceans, ice and climate change, ocean acidification, climate and biodiversity.  Broad Perspectives  – the experts speak, climate change and politics, climate change – creating new policy, climate debate  References: An Inconvenient Truth and Before the Flood	Formative Task: On Shaky Ground Task 7: Supervised Assessment: Tectonic Plates  Task 8: Research Assignment Task: Climate Science, A Broader Perspective. Persuasive Essay & Ppt presentation.	Week 5 9ABCD Tue 31st Oct  Week 9 9ABCD Due Tues 28th Nov