Edexcel BTEC Level 1/Level 2 First Award in Principles of Applied Science

In order to ensure that students are fairly assessed and given opportunities to demonstrate their knowledge and understanding of the Science qualification the following will be used to determine a student's TAG (Teacher assessed Grade)

Type Of Assessment	Topic and Assessment Criteria that will be assessed.	Date Assessment has or will take place
Mock Exam	**Unit 1:** Principles of Chemistry **Assessment Evidence:** **Learning aim A:** Explore cells, organs and genes **Learning aim B:** Explore the roles of the nervous and endocrine system in homeostasis and communication **Learning aim C:** Explore atomic structure and the periodic table **Learning aim D:** Explore substances and chemical reactions **Learning aim E**: Explore the importance of energy stores, energy transfers and energy transformations **Learning aim F:** Explore the properties and applications of waves in the electromagnetic spectrum	**Term 4**
Internal Assessment- Coursework	**Unit 2:** Chemistry and Our Earth **Assessment Evidence:** **Learning aim A:** Investigate chemical reactivity and bonding ● *Written notes/tables describing and explaining the physical properties of groups 1 and 7 of the periodic table.* ● *Completed observation sheets and a description and explanation of the chemical properties of the elements of group 1 of the periodic table, including a diagram of the electronic structure.* ● *Completed observation sheets and a description and explanation of the*	**9th September 2020-16th December 2020**

	chemical properties of the elements of group 7 of the periodic table, including a diagram of the electronic structures. **Learning aim B:** Investigate how the uses of chemical substances depend on their chemical and physical properties ● *Leaflet or booklet describing and explaining chemical and physical properties of substances and how the properties make the substances suitable for their uses.* ● *A written report which assesses the three substances and their suitability for use. Your recommendation based on sound background knowledge.* **Learning aim C:** Investigate the factors involved in the rate of chemical reactions ● *Information leaflet that identifies, describes and explains how the factors you have investigated affect the rate of reactions.* ● *A report that explains the terms 'yield' and atom economy' and analyses how they are affected by factors you have investigated.* **Learning aim D:** Understand the factors that are affecting the Earth and its environment ● *An article identifying and describing the impact of natural and human activities on the Earth and its environment.* ● *Your article needs to discuss whether human or natural events have had the biggest impact on the environment and evaluate possible solutions to the human and natural effects.*	

Internal Assessment- Coursework	**Unit 3:** Energy and Our Universe **Learning aim A:** Understand ionising radiation, its uses and sources ● *Notes and handouts; Describing and explaining radioactivity, half-life and radioactive decay, including worked examples of how to calculate the half-life of radioactive isotopes. Describing, comparing and justifying the use of radioactive isotopes in the home and workplace. Describing fission and fusion and how they can be controlled.* ● *A case study of a nuclear accident, describing and evaluating the impact it has had on the environment.* **Learning aim C:** Know the components of the Solar System, the way the Universe is changing and the methods we use to explore space ● *Posters, 3D display or PowerPoint® presentation with notes/information leaflet or video blog to describe the Universe and our Solar System and how they were formed during the Big Bang.* ● *Information leaflet or poster identifying and describing the suitability of different methods of observing the Universe and how the information collected can provide evidence of the dynamic nature of the Solar System and Universe.* ● *Verbal or written evaluation of the evidence supporting the Big Bang theory.*	**8th February 2021-7th May 2021**
Internal Assessment- Coursework	**Unit 4:** Biology and Our Environment **Learning aim A:** Investigate the relationships that different organisms have with each other and with their environment ● *A PowerPoint® describing characteristics of organisms and how they are used to create keys for identification purposes.*	**29th March 2021-25th May 2021**

	● *Posters describing food chains and food webs and how organisms depend on each other for food and survival.* ● *Information on the poster discussing how a change in the environment can affect a population and the other organisms in the food web.* ● *A poster describing, explaining and evaluating the role of genes and the environment in evolution, natural selection, survival, and extinction.* **Learning aim C:** Explore the factors that affect human health ● *A leaflet describing lifestyle choices and biological, social and genetic factors that affect health and how they can be treated and prevented.* ● *A section in the leaflet explaining and evaluating the use of treatment methods.*	