



Science Assessment Rubrics: Yr7 Biology

(D: Developing, S: Secure, E, Extending)

Name:

Mastery Indicator		D	S	E
Describe what a cell is and how to use a microscope				
Describe the function of animal and plant cells				
Describe examples of specialised animals and plant cells				
Describe the process of diffusion				
Explain what a unicellular organism is				
Describe the structure of an amoeba and euglena				
Explain the distinction between tissues, organs and organ systems				
Describe the structure of the gas exchange system				
Describe how parts of the gas exchange system are adapted to their function				
Describe the process of inhalation and exhalation				
Describe the structure of the skeleton				
Explain the function of the skeletal system				
Describe the role of joints in movement				
Explain how to measure the force exerted by different muscles				
Describe the function of the major muscle groups				
Explain how antagonistic muscles cause movement				
Learning Review 1 (D,S,E)		Learning Review 2 (D,S,E)		Learning Review 3 (D,S,E)



Science Assessment Rubrics: Yr7 Chemistry

(D: Developing, S: Secure, E, Extending)

Name:

Mastery Indicator		D	S	E
Describe how materials are made up of particles				
Explain how to use the particle model to describe different properties of different materials				
Explain the properties of a substance in three states of matter				
Describe how to use the particle model to explain changes of state				
Describe how to use the particle model to explain boiling				
Describe how to use the particle model to explain evaporation, condensation and sublimation				
Describe how to use the particle model to explain diffusion				
Describe how to use the particle model to explain gas pressure				
Recall the chemical symbols of ten elements				
Describe what atoms are				
Compare the properties of one atom of an element to the properties of many atoms				
State what a compound is				
Explain why a compound has properties different to the elements in it				
Correctly write the chemical names for some simple compounds				
Write and correctly interpret chemical formulae				
Describe what happens during chemical reactions				
Identify reactants and products in word equations				
Correctly write word equations to represent chemical reactions				
Correctly predict the products of combustion reactions				
Correctly identify decomposition reactions from word equations				
Explain the conservation of mass during chemical reactions				
Describe the characteristics of exothermic and endothermic reactions				
Learning Review 1 (D,S,E)		Learning Review 2 (D,S,E)		Learning Review 3 (D,S,E)



Science Assessment Rubrics: Yr7 Physics

(D: Developing, S: Secure, E, Extending)

Name:

Mastery Indicator	D	S	E
Describe what different forces do (e.g. thrust and air resistance)			
Explain what is meant by an interaction pair			
Describe how forces deform objects			
Demonstrate how to use Hooke's law			
Describe the effects of a field			
Describe the effect of gravitational forces on earth and in space			
Describe the difference between balanced and unbalanced forces			
Explain why the speed or direction of objects can change			
Compare the properties of longitudinal and transverse waves			
Describe how sound is produced and how it travels			
Explain why sound cannot travel through a vacuum			
Describe the relationship between wave amplitude and the volume of a sound			
Describe the relationship between wave frequency and the pitch of a sound			
Describe how the ear works and how hearing can be damaged			
Describe what ultrasound is and how it can be used			
Explain the principles of echolocation			
Predict how light will interact with different materials			
Calculate the distance travelled by light in a light year			
Draw a ray diagram showing how an image is formed in a plane mirror			
Describe what happens when light is refracted			
Explain the relationship between colour and wavelength and how colour is perceived when light is passes through different coloured filters			
Describe the structure of the universe in terms of planets, stars, solar systems and galaxies and the evidence that supports this view			

Explain how the properties of planets are linked to their location in a solar system						
Explain the effect of the Earth's tilt on the changes of the seasons						
Predict what would happen if The Earth was not tilted on its axis						
Explain why total eclipses occur in relation to the phases of the moon						
Learning Review 1 (D,S,E)		Learning Review 2 (D,S,E)		Learning Review 3 (D,S,E)		