[](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&uact=8&ved=0CAcQjRw&url=http://www.easyfundraising.org.uk/causes/stninianshigh/&ei=FUo-Vc-cLoTyUJizgVg&bvm=bv.91665533,d.d2s&psig=AFQjCNEa08WlCtOW9WaJdemFWEmqt2bMNA&ust=1430231952650835)

**Higher Human Biology**

**Physiology and Health: Key area 6 The structure and function of the heart**

By the end of this topic I will be able to:

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| 1. Accurately describe the flow of blood through the heart and its associated blood vessels. 2. Label a diagram of the heart with all 4 chambers and blood vessels. 3. Calculate cardiac output using CO = HR x SV 4. Describe the cardiac cycle including using the terms atrial and ventricular systole and diastole. 5. Describe the effect of changing blood pressure on the AV valves and SL valves of the heart. |  |  |
| 1. Identify the location of the Sino Atrial Node (SAN) and Atrio-Ventricular Node (AVN) and describe their role in the cardiac conducting system. 2. Interpret an electrocardiogram (ECG) |  |  |
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| 1. State that the medulla regulates the rate of the SAN through the antagonistic action of the Autonomic Nervous System (ANS). 2. Describe how the sympathetic and parasympathetic nervous system regulate heart rate via the action of noradrenaline (sympathetic NS) and acetylcholine (parasympathetic NS). 3. Give an account of the changes in blood pressure (in response to the cardiac cycle) as blood flows through the circulatory system. 4. Use a sphygmomanometer to read blood pressure. 5. State that 120/80 mmHg is a typical blood pressure reading for a young adult. 6. State that hypertension is a major risk factor for many diseases |  |  |