Cardiovascular System Transition Task

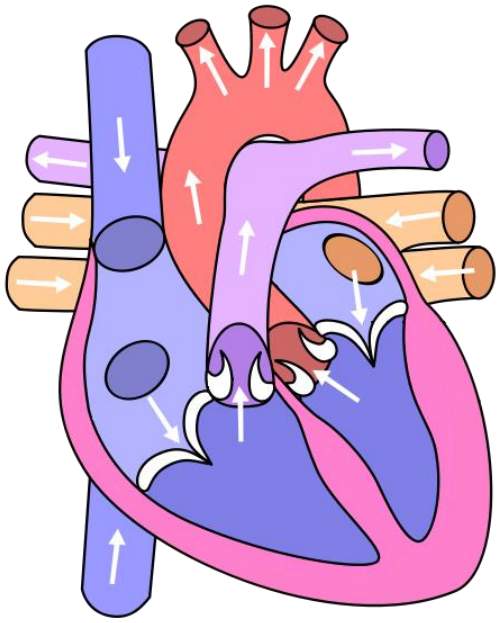
Using your prior knowledge, the transition lesson and independent research (list of recommended resources at the end of the task) to work through the sheet in detail.

Please submit once completed by emailing it to warrilow.k@kevi.org.uk

Heart: atria, ventricles, bicuspid valve, tricuspid valve, aortic valve, pulmonary valve, aorta, vena cava, superior and inferior, pulmonary vein, pulmonary artery.
Blood vessels: arteries, arterioles, capillaries, veins, venuoles.
Function of cardiovascular system: delivery of oxygen and nutrients, removal of waste products.
Thermoregulation: vasodilation and vasoconstriction of vessels.
Function of blood: oxygen transport, clotting, fighting infection.

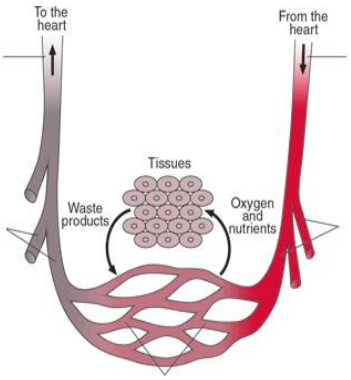
P1 Label the diagram of the human heart

atria, ventricles, bicuspid valve, tricuspid valve, aortic valve, pulmonary valve, aorta, vena cava – superior and inferior, pulmonary vein, pulmonary artery



Label the diagram using the blood vessels of the cardiovascular system

Veins, Arteries, Capillaries, Venules, Arterioles



Explain the functions of each of the blood vessels in the body	
	Describe the structure and explain how this helps the function of the vessel the body
Veins	***What are the key characteristics of the blood vessel?*** ***How does this help the function within the body?***
Venules	***What are the key characteristics of the blood vessel?*** ***How does this help the function within the body?***
Capillaries	***What are the key characteristics of the blood vessel?*** ***How does this help the function within the body?***

Arterioles	***What are the key characteristics of the blood vessel?*** ***How does this help the function within the body?***
Arteries	***What are the key characteristics of the blood vessel?*** ***How does this help the function within the body?***

Explain how blood is involved and how it works in the following scenarios:

How does blood contribute to the following?	
The delivery of oxygen and nutrients	
The removal of waste products	
Regulation of body temperature (inc. vasoconstriction and vasodilation)	

Explain how blood is involved and how it works in the following scenarios:	
Blood clotting	
Carrying oxygen	
Fighting infection	

Resources

Adams M et al – *BTEC Level 3 National Sport (Development, Coaching and Fitness) Student Book*
(Pearson, 2010) ISBN 9781846906503

Howley E T and Franks B D – *Health Fitness Instructor's Handbook* (Human Kinetics Europe, 2003)
ISBN 9780736042109

Palastanga N – *Anatomy and Human Movement* (Butterworth-Heinemann, 2006) ISBN 9780750688147

Sharkey B J and Gaskill S E – *Fitness and Health* (Human Kinetics, 2006) ISBN 9780736056144

Stafford-Brown J et al – *BTEC National Sport and Exercise Science* (Hodder Arnold, 2007) ISBN 9780340939512

Tortora G J and Derrickson B H – *Principles of Anatomy and Physiology* (John Wiley and Sons, 2008)

WEBSITES

American College of Sports Medicine www.acsm.org

British Association of Sport and Exercise Sciences www.bases.org.uk

Coachwise www.1st4sport.com

Human Kinetics www.humankinetics.com

Sport Science www.sportsci.org

Sports Coach UK www.sportscoachuk.org

Top End Sports www.topendsports.com