Science Theme Week

Working scientifically objectives

Title: The Complete Athlete

Year: 5		
Teaching Ideas	Visitor In / Visits Out	National Curriculum Objectives
Staying Alive: Pupils will learn about and investigate how to maintain health into old age. They will look at growth and physical changes in humans from baby to old age. They could create a whole class, large scale timeline to indicate stages in the growth and development of humans. They will learn about the changes experienced in puberty. They will research the gestation period of humans (and could compare this to other animals) including researching the length and mass of the baby as it grows (e.g. including looking at baby scan photos) Pupils should build upon previous knowledge of the human body by learning about the circulatory system e.g. draw large scale diagrams including human body parts from previous years, such as digestive system, and include circulatory system, create own models showing how blood and oxygen are pumped around the body. They could make their own 'blood' to understand the different parts of blood (e.g. white blood cells etc). They could use this model to investigate how the arteries could be blocked. They could carry out a test to investigate their own lung capacity. They should learn about the transport of water and nutrients in humans. Pupils could produce a public health campaign project explaining the changes from birth to old age in humans and promoting the importance of physical fitness and a healthy lifestyle throughout life, including possible	Doctor Mature/senior athlete (e.g. marathon runner) Literacy links: Persuasive writing Recounts – blog from perspective of athlete	• To be able to plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • To be able to record data and results of increasing complexity using scientific diagrams and labels, tables, bar and line graphs • To be able to report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • To be able to describe the changes as humans develop to old age • To be able to identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. • To be able to describe the ways in

consequences of their lifestyle choices on the heart. They could interview a doctor or professional mature athlete to carry out first hand research of how to maintain fitness in old age and the importance of this. They should consider how lifestyle choices linked to a healthy diet and exercise could impact upon them in later life.		which nutrients and water are transported within animals, including humans.