

SMSC at Parkfields Middle School



Science

Year 5

- Pupils study human physiology including the function of the brain, lungs and heart. They investigate the effect of exercise and the importance of a healthy diet.
- Reproduction is studied leading to investigating lifecycles.
- Pupils look at rainforest habitats and the responsibility we have to maintain such habitats for our future survival; this is developed in Key Stage 3.

Year 6

- Pupils study materials and their properties in chemistry and in Biology we study evolution and how ideas of evolution have changed across time using scientific evidence to support theories and ideas.
- Pupils study the topic of space and consider how cultural ideas have changed and developed across the centuries on this topic.
- We look at life on other planets and the ethics of space exploration.

Year 7

- Pupils study the importance of plants including photosynthesis and cycles including water, carbon and nitrogen. This builds on prior knowledge of our responsibility for global warming.
- We look at interdependence and the importance of bees to society and our responsibility as a community to make moral and socially informed choices, aware of the consequences of our actions.
- Pupils examine the topic of energy and its different forms looking at the reasons for renewable energy resources in the 21st century and the impact of fossil fuels on society.

Year 8

- Pupils study the importance of a healthy diet and lifestyle as part of their learning about diet and digestion. They also review the impact of poor diet and lack of exercise has on their health. This is made enjoyable by a wide variety of lessons including practical aspects to investigate energy levels in foods and research on health impacts of a poor diet and conditions such as anorexia and obesity.
- Pupils examine the effects of drugs on the body including alcohol and nicotine.
- The social, physical and emotional importance of exercise is studied along with changes to lifestyle to achieve good health.
- We also study reproduction and are introduced to the concepts of reproduction and choices of contraception.
- In chemistry, pupils look at the history of the periodic table and the social and cultural aspects of co-working. This is revisited when we look at the structure of DNA and the discovery of the double helix.

- Pupils consider the ethics of artificial selection comparing them with advances in cloning and genetic engineering.
- In Physics, we look at light and sound followed by Space where we look at space travel and its place in history (manned space crafts).