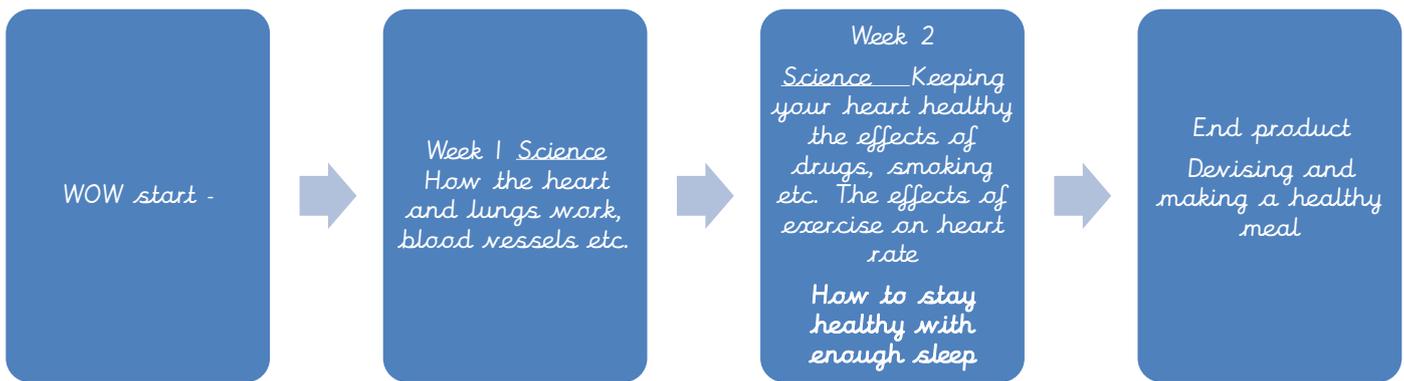


## Year 5/6 Science based unit Staying Alive (3-4wks)



Overview of unit: This covers the Switched On Science unit 'Staying Alive'. Children learn about the circulatory system, how we breath and how the heart works. They will also learn about what constitutes a healthy diet and how to take care of themselves, to keep themselves in good working order. From this, the children will use their knowledge of healthy food groups to devise and make a healthy savoury meal.

<u>Working scientifically</u>	<u>Scientific knowledge skills</u>
<ul style="list-style-type: none"> <li>• Plan enquiries, including recognising and controlling variables where necessary.</li> <li>• Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work.</li> <li>• Record data and results of increasing complexity using tables.</li> </ul> <p>Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions.</p> <ul style="list-style-type: none"> <li>• Present findings in written form, displays and other presentations.</li> <li>• Use test results to make predictions to set up further comparative and fair tests.</li> </ul> <ul style="list-style-type: none"> <li>• <b>Variable</b></li> <li>• <b>Causal relationships</b></li> <li>• <b>Quantitative data</b></li> </ul> <p><i>Previous knowledge - identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</i></p> <p><i>construct and interpret a variety of food chains, identifying producers, predators and prey.</i></p> <p><i>Previous Vocabulary: Nutrition, Skeleton, Producers. Prey, Predators, Oesophagus, Intestine, Digestion / digestive / digest</i></p>	<ul style="list-style-type: none"> <li>• Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. (mechanism of breathing/structure and functions of gas exchange system in humans)</li> <li>• Recognise the impact of diet, exercise, drugs and lifestyle on the way the human body functions (smoking on breathing system)</li> </ul> <ul style="list-style-type: none"> <li>• The effects of drugs (including as medicines as well as substances misuse) on behaviours.</li> <li>• describe the ways in which nutrients and water are transported within animals, including humans.</li> </ul> <ul style="list-style-type: none"> <li>• <b>Circulatory</b></li> <li>• <b>Oxygenated/deoxygenated</b></li> <li>• <b>Respiration</b></li> </ul>

## DT skills

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting], accurately
- select from and use a wider range of ingredients, according to their functional properties and aesthetic qualities
- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- **nutritional**
- **contamination**
- **aesthetic**
- **intolerance**

Previous knowledge - Understand that certain foods are seasonal and choose seasonal produce for their recipe. (Teeth) Previous Vocabulary - Seasonal, Recipe, Ingredients

## PSHE

- what constitutes a healthy diet (including understanding calories, and other nutritional content)
- the principles of planning and preparing a range of healthy meals
- the characteristics of a poor diet and risks associated with unhealthy eating (including, for example, obesity and tooth decay) and other behaviours (eg the impact of alcohol on diet or health)
- the characteristics and mental and physical benefits of an active lifestyle
- the importance of building regular exercise into daily and weekly routines and how to achieve this; for example walking or cycling to school, a daily active mile or other forms of regular, vigorous exercise
- the risks associated with an inactive lifestyle (including obesity)
- how and when to seek support including which adults to speak to in school if they are worried about their health
  - how to recognise early signs of physical illness, such as weight loss, or unexplained changes to the body
  - the importance of sufficient good quality sleep for good health and that a lack of sleep can affect weight, mood and ability to learn.

**Body image**

**Personal responsibility**

**Obesity**

During this term, there will be a Sex Education topic covered separately. During this term, there will be a Basic First Aid topic covered for Year 5. (know how to make a clear and efficient call to emergency services if necessary. Concepts of basic first-aid, for example dealing with common injuries, including head injuries

Previous knowledge: what constitutes a healthy diet (including understanding calories and other nutritional content), •the principles of planning and preparing a range of healthy meals •the characteristics of a poor diet and risks associated with unhealthy eating (including, for example, obesity and tooth decay) and other behaviours, dental health and the benefits of good oral hygiene and dental flossing, including regular check-ups at the dentist.

Basic First Aid (It takes guts)

Ingredient choices may be determined by seasonality or nutritional value. Food must be prepared carefully and cooking instructions followed closely to avoid any contamination. Food should be stored correctly, in order to avoid the risks of food poisoning.

Seasonality

Preparation

Ingredients

Healthy

Nutritional

Calories

Inactive

Lifestyle

Sufficient

Obesity

Substances

Body functions

Diet

Exercise

Circulatory system

Blood vessels

Function