

	Content	Concepts	Connections	Competences
Autumn	<ul style="list-style-type: none"> • Describe the content of a healthy human diet and explain why each is needed • Calculate the energy requirements in a healthy daily diet a person loses mass when the energy content of the food taken in is less than the amount of energy expended by the body. Exercise increases • The amount of energy expended by the body. • Describe the consequences of imbalances in the diet, including obesity, starvation and deficiency diseases • Describe the tissues and organs of the human digestive system including adaptations to function • Explain how the digestive system digests food using enzymes as simple biological catalysts. • The rate at which all the chemical reactions in the • cells of the body are carried out (the metabolic rate) • varies with the amount of activity you do and the • proportion of muscle to fat in your body. • Metabolic rate may be affected by inherited factors. • Inherited factors also affect our health; for example • cholesterol level. 	<ul style="list-style-type: none"> • Food and diet • Balance of food groups • Health issues 	<ul style="list-style-type: none"> • Teamwork • Communication skills • Language skills • PSHE – health issues. • Creativity – poster • Maths – calculations, equations, rearrange formula. • Geography – graphing. • Reflective skills – history • History – links to global aspects of biology – scientists. 	<p>Explain that a healthy diet contains the right balance of the different foods you need and the right amount of energy.</p> <p>Describe that: carbohydrates, fats and proteins are used by the body to release energy and to build cells. Mineral ions and vitamins are needed in small amounts for healthy functioning of the body.</p> <p>A person is malnourished if their diet is not balanced. This may lead to a person being overweight or underweight. An unbalanced diet may also lead to deficiency diseases or conditions such as Type 2 diabetes.</p> <p>evaluate information about the effect of food on health</p> <p>Investigate the energy in different foods</p> <p>Evaluate the validity of experiments to determine the energy in foods.</p>