Scheme Of Work Overview: Sustainable Food

Context

The sustainability of our planet is at a critical point. Environmental issues linked to food production, such as deforestation and climate change, along with humanrights issues, such as fairtrade, are crucial to teach to school pupils. This topic allows the pupils to investigate the issues above, in the context of the food that they eat. There is the opportunity to create two dishes which fit within the topic, whilst allowing pupils to discover what a healthy diet looks like.

Aims

- Pupils will learn where their food comes from and the environmental impacts of transporting food around the world
- They will research the issues surrounding Fair Trade
- They will investigate the environmental impact of farming, including deforestation
- Pupils will make Energy Balls (ideally using Fair Trade ingredients) and plant-based Rainbow Burgers
- Pupils will follow kitchen hygiene rules and practise food preparation skills when preparing the food

Key vocabulary

Producer-	Creates, or produces, goods and provide services, for example, farmers
Consumer-	Use money to buy the goods that have been produced
Trade-	The process of buying and selling goods
Environment-	All our surroundings including the air, soil, water, plants and animals
Sustainable-	The concept that humans must interact with the environment in a way that ensures that there will be enough resources left for future generations
Ethics-	Questions relating to whether something is right or wrong
Fair Trade-	Allows farmers to be paid a fair price for their produce and to have good working conditions
Plant-based diet-	A diet that focuses on foods derived from plant sources, including fruit, vegetables, grains, pulses, legumes, nuts and meat substitutes e.g. soy products

Lesson Overview

Lesson	Main Activities	Learning Objectives
1 The World And Its Resources	Discuss what are our basic needs as humans and revise the Eatwell Guide Study the distribution of food by researching where different food products come from Learn about trade links, food miles and the distribution of water	 To state what our basic human needs are To describe what the Eatwell Guide shows and explain what a balanced diet looks like To research and explain where different foods are grown/raised/caught, around the world To describe some of the trade links created in the food industry To state what food miles mean and explain how they can affect the environment To explain the importance of clean water and state that the distribution of clean water around the world is not equal
2 Fair Trade	Explore the Fairtrade website and discover how the organisation helps producers Complete the research task, Fair Trade Price Investigation	 To explain what fair trade means To explain how the Fairtrade Foundation and other organisations can help and support producers To research and explain any price differences between fair trade and non-fair trade products
3 Making Energy Balls And the Rainforest Alliance	Make Energy Balls Research the Rainforest Alliance using their website	 To research Fairtrade products To recall basic kitchen hygiene rules To practise food preparation skills To explain what the Rainforest Alliance organisation does to help minimise the impact of farming
4 The Environmental Impact Of Farming	Discover some of the environmental impacts of animal agriculture Watch the video: The role of plant and animal agriculture in a net zero world Complete the Comparing Burgers worksheet	 To describe the environmental impact of meat production To identify alternative foods to meat To compare the nutritional content of a range of burgers
5 Making Rainbow Burgers	Learn how to make Rainbow Burgers by watching a video of professional chef in the kitchen Make Rainbow Burgers	 To recall basic kitchen hygiene rules To follow a recipe to create Rainbow Burgers To use the following skills to prepare the ingredients: claw grip and bridge hold techniques when cutting; grating; snipping with scissors; mixing; and shaping the burgers
6 Food And The Future	Take part in a food production role play Write a persuasive letter, aiming to highlight or change an issue, relating to food production Consider what positive choices can we make to help make food production more sustainable	 To take part in a food production role play, showing the different viewpoints To write a persuasive letter to encourage ethical and sustainable food production

Please ensure that any food allergies and intolerances have been identified, in accordance with your school policies.

Subject Content: Sustainable Food

English National Curriculum

Health Education

Healthy eating:

- 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 (e.g. the impact of alcohol on diet or health)

Science

Animals, including humans:

• Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

Geography

Human and physical geography:

 Human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Design And Technology

Cooking And Nutrition:

- Understand and apply the principles of a healthy and varied diet
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques

Maths

Number- addition, subtraction, multiplication and division:

• Solve problems involving addition, subtraction, multiplication and division

English

Writing- composition:

• Plan their writing by identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own

Computing

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration

Health and Well-being Area of Learning and Experience

Developing physical health and well-being has lifelong benefits:

- I can explain the importance of a balanced diet and nutrition and the impact my choices have on my physical health and well-being.
- I can plan and prepare basic, nutritious meals.

Our decision-making impacts on the quality of our lives and the lives of others:

- I can recognise that some decisions I make will have a long-term impact on my life and the lives of others.
- I can understand that decisions can be made individually and collectively, and that they can be influenced by a range of factors.

How we engage with social influences shapes who we are and affects our health and well-being:

• I have developed an understanding that my values, attitudes and identity are shaped by different groups and influences.

Science and technology Area of Learning and Experience

Being curious and searching for answers is essential to understanding and predicting phenomena:

• I can understand how my actions and the actions of others impact on the environment and living things.

Humanities Area Of Learning and Experience

Events and human experiences are complex, and are perceived, interpreted and represented in different ways:

• I can form, express and discuss my own opinions on a range of issues after considering evidence and the views of others.

Our natural world is diverse and dynamic, influences by processes and human actions:

• I can describe and give simple explanations about the impact of human actions on the natural world past and present.

Informed, self-aware citizens engage with the challenges and opportunities that face humanity, and are able to take considered and ethical action:

• I have an understanding that injustice and inequality exist in societies. I also have an understanding of what human rights are and why they are important to me and other people.

- I can recognise that there is a difference between wants, needs and rights.
- I can understand that there are a range of factors that influence people's behaviour, actions and decisions.
- I can understand the consequences of my actions and the actions of others, and how these affect local, national and global issues.

• I can understand that there a range of factors that influence my and other people's behaviours, actions and decisions, and that these include ethical and moral judgements and viewpoints.

Languages, Literacy and Communication Area of Learning and Experience

Expressing ourselves through languages is key to communication:

- I can respond to others' points of view, seeking clarity, structuring arguments, summarising and explaining what I have heard, read or seen.
- I can interact with others, talking and writing about my thoughts, feelings and opinions showing empathy and respect.

Experiences And Outcomes: Sustainable Food

Scottish Curriculum For Excellence

Health and Wellbeing	 Social welbeing: As I explore the rights to which I and others are entitled, I am able to exercise these rights appropriately and accept the responsibilities that go with them. I show respect for the rights of others. (HWB 2-09a) Physical wellbeing: I am developing my understanding of the human body and can use this knowledge to maintain and imporve my wellbeing and health. (HWB 2-15a) Food and health: By applying my knowledge and understanding of current healthy eating advice I can contribute to a healthy eating plan. (HWB 2-30a) Through exploration and discussion, I can understand that food practices and preferences are influenced by factors such as food sources, finance, culture and religion. (HWB 2-34a) When preparing and cooking a variety of foods, I am becoming aware of the journeys which foods make from source to consumer, their seasonality, their local availability and their sustainability. (HWB 2- 35a) By investigating food labelling systems, I can begin to understand how to use them to make healthy food choices. (HWB 2-36a)
Literacy and English	 Writing: By considering the type of text I am creating, I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience. (LIT 2-26a) I can persuade, argue, explore issues or express an opinion using relevant supporting detail and/or evidence. (LIT 2-29a)
Numeracy and Mathematics	 Number, money and measure: I can manage money, compare costs from different retailers, and determine what I can afford to buy. (MNU 2-09a)
Social Sciences	 People, place and environment: I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally-responsible way. (SOC 2-08a) People in society, economy and business: Through exploring ethical trading, I can understand how people's basic needs are the same around the world, discussing why some societies are more able to meet these needs than others. (SOC 2-20a)
Technologies	 ICT to enhance learning: Throughout all my learning, I can use search facillities of electronic sources to access and retrieve information, recognising the importance this has in my place of learning, at home and in the workplace. (TCH 2-03b)