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| Subject | Science | Unit | Digestive Systems & the Food Chain |
| Class | Seal LKS2 | Year/Term | 2020-2021 Autumn |

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| Key Concept | Skills | |
| Work Scientifically | Ask relevant questions and use different types of scientific enquiries to answer them | |
| Set up simple, practical enquiries, and comparative and fair tests | |
| Make systematic and careful observations, taking accurate measurements using a range of equipment | |
| Gather, record, classify and present data | |
| Report on findings from enquiries | |
| Use results to draw simple conclusions and suggest improvements | |
| Communicate Scientifically | Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables | |
| Identify differences, similarities or changes related to simple, scientific ideas and processes | |
| Use straightforward, scientific evidence to answer questions or to support findings | |
| Biology: To understand animals and humans | Describe the simple functions of the basic parts of the digestive system in humans. | |
| Understand that animals need the right types and amounts of nutrition, that they cannot make their own food, and they get nutrition from what they eat | |
| Recognise the importance of diet and exercise on the way the human body functions  Identify the different types of teeth in humans and their simple functions | |

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| Learning Links | Subject/theme |
| Compare Roman diet to today. What has changed? Why do you think it has changed? | History/Romans |
| Food Chains | Longitudinal/Science |
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| Core Content | Key Concept |
| Understand the intestines | Biology: To understand animals and humans |
| Understand the food pyramid and why it is important | Biology: To understand animals and humans |
| Know about vitamins and minerals | Biology: To understand animals and humans |
| Understand salivary glands and taste buds | Biology: To understand animals and humans |
| Know the different types of teeth | Biology: To understand animals and humans |
| Understand the food chain, know how natural cycles work | Biology: To understand animals and humans |

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| Key Vocabulary | | | |
| Lesson 1 (7th Sept): Small Intestine  Large Intestine  Stomach  Appendix  Nutrient  Digestive System  Lesson 2:(28th Sept)  Food Pyramid  Natural Sugar  Dairy Product  Meat  Fruit and Vegetables | Lesson 3: (12th Oct)  Vitamin A  Vitamin B  Vitamin C  Vitamin D  Mineral  Lesson 4:(19th Oct)  Saliva  Salivary Glands  Taste Buds  Digest | Lesson 5: (2nd of Nov)  Incisors  Canines  Chew  Molars  Dentist  Teeth  Lesson 6: (9th of Nov) Producer  Consumer  Decomposer | |
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| Assessment Opportunity | | | |
| Self-Assessment at the end of a sequence of lessons using a blank Knowledge Organiser. How much can the children remember?  Scientific Terminology Quiz at start of the lesson from the previous lesson key vocabulary list. Can the children use the key vocabulary words correctly?  Can the children label the correct parts of the Digestive System?  Can the children label the correct teeth?  At the end of the unit the children can work through the summative assessment from Developing Experts. | | | |
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| Date | Learning Objectives | Lesson Outline (DE Lesson Plans in planning file behind MTP) | Resources |
| Longitudinal  Beach School | Be able to identify food chains for sea animals | Introduce food chains (First Beach Science Lesson)  Create our own food chains (Second Beach Science Lesson)  Follow Who eats who scheme (Third and Fourth Beach Lesson)  End with create a food web scheme work (Fifth and Sixth Beach Lesson  )  Final Beach School Session - Linked to previous lessons in science - Healthy Diet and Nutrition - Bring our food diets and compare with others - Can we Identify any similarities and differences? Create our own food plate based on our class. | [Create a Food Web](https://www.mcsuk.org/downloads/coolseas/teachit/Food_Webs/Create_a_food_web.pdf)  [Who eats who?](https://www.mcsuk.org/downloads/coolseas/teachit/Food_Webs/who_eats_who_older_years.pdf) |
| 7th September 2020 | L.O I can explain what happens to food from the point it enters your mouth and exits your body.  SC: Higher: I can show how the digestive system works by creating a labelled model.  Middle: I can sequence the parts of the digestive system.  Lower: I can name the organs responsible for absorbing food and water. | Explore the presentation to learn about the journey the food we eat takes, through the body. | Developing Experts  <https://www.developingexperts.com/s/missions/157#presentation>  Craft Materials  Knowledge Organisers |
| 21st September 2020 | L.O. To plan and carry out my own experiment about what happens in the digestive system | Start with vocabulary checks - do the children know what the lesson 1 vocabulary means?  Demonstrate the experiment and then get the children to talk through it before they carry it out themselves. | <https://www.youtube.com/watch?v=7av19YhNkhE#:~:text=some%20water%20to%20represent%20saliva,to%20represent%20the%20small%20intestine.>  Experiment Video  Science Experiment |
|  | Get the children to carry out the experiment - does this support their understanding of what happens in the Digestive System?  Write up what happened in the experiment (if not enough time, they can do it next lesson) | <https://www.stem.org.uk/resources/elibrary/resource/35396/digestive-system-experiment#&gid=undefined&pid=1> Experiment sheet which sets out what to do and resources needed. |
| 21st  September 2020 | L.O. To be able to write up a scientific experiment about the Digestive System | To start or finish writing up the scientific experiment from last lesson. If the children have finished, get them to create a video or powerpoint explaining the digestive system as an assessment opportunity. | The children should be able to use the Vocabulary list and Knowledge Organisers to support in the lesson. |
| 28th September 2020 | L.O. To understand the importance of the food pyramid and a balanced diet.  S.C. Higher: I can evaluate my own diet and make suggestions.  Middle: I can explain why a balanced diet is important.  Lower: I can name the food groups in the food pyramid. | Start by introducing the new vocabulary that the children will need for this lesson.  Discuss the food plate and why it is important that we get a variety of different foods.  Go through what a balanced diet should consist of and get the children to look at their own diets can they make their own balanced food plate. | <https://www.developingexperts.com/s/missions/158>  Presentation  Vocabulary list  Balanced food plate |
| 5th October 2020 | L.O. To be able to understand the effects of sugar on the body. | To start with, do the children know the recommended daily allowance for sugar a day for their age?  Go through the recommended daily allowances and why we do need some sugar in our body - discuss why diabetes type 1 needs sugar when they have low blood sugar.  The children will investigate which drinks have more sugar in them? Create a Hypothesis at the start to which one has more sugar in. Are they surprised by the result?  The children will look at the packaging to determine how much sugar is in a drink and then measure it out as a class to see how much it is visually. (Can the children recognise that some packaging is per 100ml or some by the whole amount?)  Once they have written up the experiment as a challenge can they write up a fact file about sugar. | Presentation  Table with drinks name and sugar content  Coke  Orange Juice  Smoothie  Lucozade  Diet Coke  Ribena  Sugar  Sandwich Bags |
| 12th October | L.O.Describe vitamins and minerals  Higher: Describe the impact different vitamins and minerals have on our bodies.  Middle: Give some examples of foods rich in vitamins and minerals.  Lower: Give some examples of vitamins and minerals.  L.O. Explain the effects of a lack of vitamins and minerals  Higher: Suggest how to overcome a deficiency disease.  Middle: Give an example of a deficiency disease.  Lower: Give an example of a problem caused by a lack of vitamins and minerals. | Follow the Developing experts lesson plan by introducing the children to different vitamins and minerals. What is the role of the vitamin in our bodies? What happens if we do not have enough vitamins and minerals? | <https://www.developingexperts.com/s/missions/159> |
| 19th October 2020 | To understand the function of the taste buds and salivary glands.  Higher: Explain a way to test our taste buds.  Middle: Describe the function of the taste buds and salivary glands.  Lower: State what the taste buds and salivary glands are.  To design and carry out a fair and comparative test. | Introduce the vocabulary that is linked to this lesson and then go through the presentation explaining the taste buds and salivary glands.  Taste Test - Experiment | <https://www.developingexperts.com/s/missions/155> |
| 2nd of November 2020 | L.O Describe the functions of different types of teeth.  S.C. Higher: Explore the impact of diet on dental hygiene.  Middle: Explain the function of different types of teeth.  Lower: Identify and name different types of teeth. | To go through key vocabulary in the lesson.  Go through the different teeth and what they are for and then carry out the egg staining experiment to see the impact of diet on dental hygiene link back to sugar lesson. | [https://www.](https://www.developingexperts.com/preview-lesson/156)  [developingexperts.com/preview-lesson/156](https://www.developingexperts.com/preview-lesson/156)  Eggs  Blackcurrant Juice  Coke  Coffee |
| 9th of November 2020 | L.O. To know the difference between producers, consumers and decomposers.  S.C. Higher: I can identify the producers, consumers and decomposers in some different habitats.  Middle: I can explain the difference between producers, consumers and decomposers.  Lower: I know what the words producer, consumer, and decomposer mean | To go through the vocabulary that the children will need to know in the lesson. Follow the developing experts lesson plan for this lesson.  Link to beach school science as we would have been covering food chains by this point. | [https://www.developingexperts.com/s/](https://www.developingexperts.com/s/missions/175)  [missions/175](https://www.developingexperts.com/s/missions/175) |
| 16th of November | Summative Assessment to assess the children’s knowledge at the end of the unit. |  | <https://fileboy.herokuapp.com/files/get/4c3ae864-b423-43cd-baf0-044322e58106> |