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|  | Engage  4.11.19 | Develop  11.11.19 | Develop  18.11.19 | Develop  25.11.19 | Develop  2.12.19 | Innovate  9.12.19 | Express  16.12.19 |
| Events Diary |  |  |  |  |  |  |  |
| Maths  Year 3 | Number  Subtraction | Number  Subtraction | Number  Multiplication and Division | Number  Multiplication and Division | Number  Multiplication and Division | Number  Multiplication and Division | Number  Multiplication and Division |
| Year 4 | Number  Subtraction | Number  Subtraction | Number  Multiplication and Division | Number  Multiplication and Division | Number  Multiplication and Division | Number  Multiplication and Division | Number  Multiplication and Division |
| Year 5 | Number  Four operations | Number  Four operations | Number  Fractions | Number  Fractions | Number  Fractions | Number  Fractions | Number  Fractions |
| Year 6 | Number  Four operations | Number  Four operations | Number  Fractions | Number  Fractions | Number  Fractions | Number  Fractions | Number  Fractions |
| Cornerstones | Mathematics  Convert between different units of measure: grams to kilograms and vice versa with increasing fluency.  Weigh and compare sealed bags representing the stomach capacities of humans and other animals. Create a table to show the weight of each bag and the animal they think it relates to. Answer questions about ordering weights and the differences between the bag capacities.    Note  Choose a variety of stomach capacities to compare. A cow’s stomach can hold up to 182 litres of food (that’s about the size of two large refuse bags!); a wolf’s stomach holds up to four and a half litres of food; an adult human’s holds about a litre of food and a child’s stomach can hold a tiny 300 ml! Extend the activity by allowing children to weigh bags containing individual popular meals, such as, baked beans on toast, a bowl of cereal, burger and chips or a packet of crisps! Ask children to consider the meal sizes compared to the actual capacity of their stomachs.  Ma M 4 Estimate, compare and calculate different measures, including money in pounds and pence.  Ma S 1; En SL 4, 5 | | | | | | |
| Speaking and Listening |  | Spoken language  Ask questions in response to others’ ideas and views.  Learn about idioms. Look at some simple examples and decipher their real meaning. Work in small groups to discuss and decipher some tooth-related examples, then explain what they think they mean to the whole group.    Note  An idiom is a word or phrase that is not meant literally, such as ‘raining cats and dogs’. There are many tooth-related idioms, including ‘a kick in the teeth’, ‘as scarce as hen’s teeth’, ‘cut your teeth’, ‘get the bit between your teeth’, ‘like pulling teeth’, ‘lie through your teeth’ and ‘fed up to the back teeth’. Alternatively, children could match definition cards to the phrases presented, for example, ‘This idiom means that something is very rare. What is it?’  En SL 2 Ask relevant questions to extend their understanding and knowledge.  En SL 3, 4, 6; En R C 1a, 1g | Spoken language  Speak with confidence to an increasing range of audiences, using interesting details and further non-verbal features.  Read their explanations aloud to the group, asking others to raise a hand when they hear an idiom. Evaluate their own and others’ work, with particular reference to whether the idioms made sense and were used in the correct context.    Note  Ask the children to listen out for idioms used in every day life and report back if they hear any idioms being used at home!  En SL 11 Consider and evaluate different viewpoints, attending to and building on the contributions of others.  En SL 1, 4, 6; En R C 1g, 2a, 2b | Spoken language  Listen and respond to the speaker’s main points adding own comment.  Watch an animation, film clip or demonstration model to see the digestive system at work. Listen carefully to the accounts and information given and, as a class, share the facts they remember. Use a shared writing process to create a class flow chart of the digestive system, naming the processes taking place at different stages. Identify their own knowledge gaps and make a note of these for further research.    Note  Display key words needed to describe the digestive system such as large and small intestine, absorbed, swallowed, saliva, acid, abdomen, bile, colon and oesophagus. There are many more words to discover in scientific dictionaries!  En SL 5 Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings.  En SL 1, 2, 6; En R C 1c, 3; Sc A 1 | Spoken language  Explain a task or experience using details, showing clear understanding of the main points.  Watch a PowerPoint presentation or animation about the importance of a healthy bowel. Discuss what they have heard and recap on the most important points. Talk about and explain why some people find it an embarrassing subject. Work in pairs to compose a short explanation of why it’s important to have a healthy bowel.    Note  Some children may find this a sensitive issue. Encourage all children to take part by adding in some funny facts or silly poop jokes!  En SL 5 Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings.  En SL 1, 2, 6; PSHE 3a, 3b; Sc A 1  Spoken language  Speak with confidence to an increasing range of audiences, using interesting details and further non-verbal features.  Complete their slogans and share them with others. Welcome suggestions for improvements and amend their slogans as necessary. Combine their slogan into a poster format using ICT or drawn illustrations, then record as a jingle suitable for a radio or television advertising campaign. Listen back to their recorded slogans.    Note  Play sample TV and radio adverts to the children and ask them to analyse key features before recording their own ‘happy bowel’ advertising slogan. Slogans could be set to music or to accompany a presentation about keeping a bowel happy and healthy. You may need to pre-select the images for children to use!  En SL 8 Speak audibly and fluently with an increasing command of Standard English.  En W C 3a; AD 2; Co 6 | Giganta-gut!  Can you work together to create a ‘Giganta-gut’?  A large scale working model of the human digestive system that demonstrates how it works.  Spoken language  En SL 11 Consider and evaluate different viewpoints, attending to and building on the contributions of others.  En SL 5 Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings.  Writing  En W C 2d In non-narrative material, use simple organisational devices (e.g. headings and sub-headings).  D&T  DT D 1 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.  DT D 2 Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.  DT TK 2 Understand and use mechanical systems in their products (e.g. gears, pulleys, cams, levers and linkages).  DT TK 1 Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.  DT M 2 Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.  DT E 2 Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.  Science  Sc WS 3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.  Sc WS 5 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.  Sc A 1 Describe the simple functions of the basic parts of the digestive system in humans.  Sc WS 4 Gather, record, classify and present data in a variety of ways to help in answering questions.  Make a flowchart to show each stage of human digestion. Be sure to get the stages in the right order – we don’t want a blockage to occur!  Divide yourselves into groups, allocating each group a stage of human digestion.  Work in your group to write a list of facts about your allocated stage of digestion. This will help you remember what your part of the model needs to do.  Decide how you are going to make your part of the model. What size it will be? How will you make it interactive and how will you organise the making process?Draft your ideas before getting started.  You will need to liaise with other groups to make sure the overall model works effectively. Consider entry and exit points.  What materials and resources will your group need? Make a list and decide who is responsible for gathering the different items.  Now it’s getting tricky! Decide how to create the actions (processes) needed for your part of the system. Does your model need to chew, swallow, pump, churn, mix or excrete? It’s your job to make it happen!  Remember to continue speaking to other groups. You will need to find ways of connecting all the parts together!  Which group has the large intestine? How long will their part need to be?  Time for a test run. Can you pass water through your model from the mouth to the anus? Measure what you put in and what comes out! Make any necessary adjustments.  Now let’s try digesting something solid. What could you use? Work together to suggest alternatives. Maybe you could test different meals?  Record your findings. What do they show? Which food successfully passed through your model? Did your model become constipated?  Is there anything you could do to improve your model? How could you make those changes?  Why not invite parents and carers to watch a scientific demonstration? Be prepared to answer questions from your audience.    CONGRATULATIONS! You have completed your Innovation Challenge. | Spoken language  Convey their own opinions and answers clearly, supported by evidence.  Discuss and reflect upon ways in which the general public could change their eating habits to improve the care of their teeth and digestive systems. Identify some key health problems facing our society and explain what could be changed to improve the health of the nation.    Note  Encourage the children to reflect back on what constitutes poor dental and digestive health and hygiene. Encourage all children to make a contribution to the conversation, drawing on their learning and observations during the project.  En SL 5 Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings.  En SL 4; PSHE 3a |
| Reading | Reading  Read from a wide range of sources to consolidate and extend vocabulary, using dictionaries, thesauri and reference books effectively.  Use a dictionary to find out the meaning of various dental terms including words heard during their visit and those given by the teacher. Make a dental glossary that can be used as part of a toothy fact file.    Note  Dentistry is full of technical words! Children could research specialist vocabulary such as denture, bridge and crown as well as the words suggested above. Provide examples of glossaries to consider how they are set out for easy use, including alphabetical ordering.  En R C 1c Use dictionaries to check the meaning of words that they have read.  En R C 2a, 3; En W C 2d  Reading  Find and record information independently from non-fiction using features (e.g. contents page, the index, text boxes and captions).  Use a range of information sources including the web, non-fiction materials and literature collected on their visit to begin gathering facts about teeth. Record their facts in note form and share these with others in the group. Consider whether there are any discrepancies in their facts and check for accuracy.    Note  Have a look at examples of fact files on a range of subjects to find out what features to include and how they are set out.  En R C 3 Retrieve and record information from non-fiction.  En W C 2d; En SL 2, 11; Co 5, 6, 7 | Reading  Make simple comments about the main purpose of a text, beginning to recognise authorial intent.  Explore a variety of common, everyday idioms. Work in pairs to read a text, highlighting words and phrases they think are examples of idioms.    Note  Some commonly used idioms include: ‘the writing’s on the wall’; ‘have a chip on your shoulder’; ‘jump the gun’; ‘at the drop of a hat’ and ‘sick as a dog’. For those needing extra support, these phrases could be included in simple sentences instead of longer or more complex text.  En R C 2a Check that the text makes sense to them, discussing their understanding and explaining the meaning of words in context.  En R C 2b  Explain the meaning of tooth-related idioms in precise and clear sentences. Use stopping points in the lesson to read an explanation aloud to others and see if they can guess which idiom is being explained.    Note  Provide children a range of tooth-related idioms to explain, modelling examples of precise and clear sentences.  En W C 2a Compose and rehearse sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2).  En W C 1a | Writing  Critically evaluate their own and others’ writing, suggesting changes to grammar and vocabulary to improve consistency.  Work as a class to identify a list of idioms for use in a written explanation entitled ‘Tooth decay’. Use the agreed list to start drafting a short paragraph. Remember that excessive use of idioms will overwhelm their reader, but a well-placed idiom in their writing can be the key phrase or concept that their reader remembers.    Note  You could provide children with a list of appropriate idioms to use in their writing, as well as encouraging them to use their own examples and ideas. Some suggested idioms with which to challenge them might be ‘against the clock’; ‘a piece of cake’; ‘go the extra mile’; ‘hit the sack’; ‘keep an eye on it’; ‘last but not least’; ‘pig out’; ‘rule of thumb’ and ‘you are what you eat’.  En W C 3a Assess the effectiveness of their own and others’ writing and suggest improvements.  En W C 1a; En R C 1g, 2a; En SL 5 | Reading  Find and record information independently from non-fiction using features (e.g. contents page, the index, text boxes and captions).  Research information about the human digestive system using a number of non-fiction sources. Search the web for images, diagrams and information and collect notes and facts on a brainstorm sheet. Share their findings with others in the class to establish what fascinating facts they have learned since the start of the lesson.    Note  Read an excerpt of text to the children on the theme of digestion. Check their comprehension of the text by asking them to recall a fact from the text in their own words. Provide a good selection of non-fiction books with plenty of posters, diagrams and other useful source materials.  En R C 3 Retrieve and record information from non-fiction.  En SL 6; Sc A 1; Co 5, 6, 7 | Reading  Find and record information independently from non-fiction using features (e.g. contents page, the index, text boxes and captions).  Use various information sources including books, posters and leaflets to find out more about the importance of a healthy bowel. Search for things that can be done to keep their own bowels happy and healthy and record their findings in a list.  En R C 3 Retrieve and record information from non-fiction.  En W C 2d; Co 5, 6, 7; PSHE 3a, 3b; Sc A 1  Reading  Explain basic features of language structure and presentation, and explain how they contribute to meaning.  Find out what the word ‘slogan’ means and how a slogan is used. Look at examples of slogans in everyday life and write down some examples of their own. Work in pairs to compile a list of ‘Fabulous features’ for slogan writing and share this with the group.    Note  ‘Fabulous features’ should include simplicity, rhyme, repetition, brevity, precision and humour – all in one single phrase or sentence, of course!  En R C 2f Identify how language, structure, and presentation contribute to meaning.  En R C 1c; En SL 4 | Reading  Identify main ideas, drawn from more than one paragraph and summarise them.  Investigate a selection of newspaper reports about dental and digestive health, including obesity. Work with a partner to spot and summarise the report’s main points. Identify the facts and opinions in the text.    Note  Model ways of summarising information into simple sentences. Ask ‘What is the main point of this paragraph? How could we summarise it?’  En R C 2e Identify the main ideas drawn from more than one paragraph and summarise these.  En R C 1b, 3; Sc A 1, 2 |
| Writing | Writing  Orally plan the structure of the whole piece, including the supporting details in each section of writing.  Work together as a whole group to think about what to include in a toothy fact file and how best to use it (for example, it might become a leaflet for display at the dental surgery and taken home by other children to read). Decide upon a target audience for their fact file. Make notes under their chosen headings and draft ideas for information they might include.    Note  They might want to focus their fact files on one aspect, such as visiting the dentist, having a dental check or cleaning your teeth.  En W C 2b Organise paragraphs around a theme.  En W C 1b, 2d  Writing  Use appropriate headings and subheadings to make information clear and cohesive.  Complete their fact files, making them attractive and easy to read. Use coloured pens for headings and key words, or use word processing software to present their writing using different font types, sizes and images for interest and emphasis.    Note  Ask children to pair up to check each others’ work, correcting any grammatical and spelling errors. Invite the dentist into school to see examples of the children’s finished work, or send them via post or email for their comments!  En W C 2d In non-narrative material, use simple organisational devices (e.g. headings and sub-headings).  En W C 3a, 3b, 4; Co 6, 7  Writing  Use some variety in length, structure or subject of sentences, generally choosing accurate tense and verb forms. | | Writing  Use paragraphs to organise ideas around a theme.  Imagine they are a piece of food travelling through a digestive system! Work together to improve a fantasy story starter that will grab the reader’s attention. Use a story map (shaped like the human digestive system!) to plan their fantasy stories and describe what happens to them at each part of the journey.    Note  A good opening sentence might be, ‘Into the dark, the moist tongue rolls me from side to side, teeth chomping, tearing me apart’. Can they improve the opening? What might happen next? Give the children their digestive system-shaped story map to help them remember the stages they would travel through!  En W C 2b Organise paragraphs around a theme.  En W C 1a, 1b; Sc A 1  Writing  Organise ideas or material in a logical sequence and attempt to create links between paragraphs.  Work with a writing partner to develop their ideas and stories. Read aloud as they write to make sure that their narrative makes sense and that sentences are varied and describe the dramatic events as they travel through the system. Use dictionaries and a thesaurus, including online versions, to find exciting or scientific verbs and nouns such as ‘masticate’, ‘bolus’ or ‘peristalsis’ to describe the different processes taking place.    Note  You could begin this lesson by acting out the digestive system! Choose one child to be the food and ask them to walk along a ‘corridor’ of the human digestive tract. Groups of children can represent the different organs involved in digestion and act out the processes that occur. For example ‘First we have the mouth: as the tongue rolls and the teeth chew, the food is coated in saliva and forms a bolus which is pushed to the back of the mouth’.  En W C 2a Compose and rehearse sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2).  Sc A 1; En W C 1b, 3a; En R C 1c; Co 5, 6, 7  Writing  Critically evaluate their own and others’ writing, suggesting changes to grammar and vocabulary to improve consistency.  Read through their narratives, ensuring that they have used the correct scientific vocabulary as appropriate. Write a neat presentation copy of their story inside the shape of a human form, using their imagination to set out their writing creatively.    Note  Maybe the children could write their narrative inside a scientific diagram from mouth to rectum!  En W C 3a Assess the effectiveness of their own and others’ writing and suggest improvements.  Sc A 1; En W C 2d, 3b, 4; En W H 2 | | Writing  Use appropriate logical connectives and include some features of persuasive writing (e.g. flattery, benefits, text in capitals, powerful verbs/adjectives, appeal, exaggeration and statistics).  Begin to draft ideas for a slogan to display in children’s toilets to remind them of ways to keep their bowel happy and healthy. Explain to an adult their intentions and experiment with different options.    Note  Model ways of tackling this task. Support the children so that they can identify what they want to say, decide how to say it (for example using rhyme or a joke) and then try out some options. An example might be ‘Eat fruit and vegetables everyday to help your poop on it’s way.’  En W C 2a Compose and rehearse sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2).  En W C 1a, 1b; En SL 5; PSHE 3a, 3b | | Writing  Critically evaluate their own and others’ writing, suggesting changes to grammar and vocabulary to improve consistency.  Begin planning a persuasive text that encourages readers to be more proactive about tooth and digestive hygiene. Form a plan, using a persuasive writing features map.    Note  Recap on features of persuasive writing such as a powerful opening sentence (‘Put simply – sugar rots teeth!’), use of present tense, logical conjunctions, emotional language, rhetorical questions and conditional sentences (‘The more sugar you eat, the more fillings you will need’).  En W C 1a Discuss writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar.  En W C 1b; Sc A 1, 2  Writing  Critically evaluate their own and others’ writing, suggesting changes to grammar and vocabulary to improve consistency.  Develop their work to include one or more examples of rhetorical questions and conditional sentences. Contribute to discussions and suggest their own. Discuss their ideas with a writing partner to see if they work.    Note  Share examples of effective plans and highlight how the examples chosen use the important features.  En W C 3a Assess the effectiveness of their own and others’ writing and suggest improvements.  En W C 3b; Sc A 1, 2  Writing  Use appropriate logical connectives and include some features of persuasive writing (e.g. flattery, benefits, text in capitals, powerful verbs/adjectives, appeal, exaggeration and statistics).  Complete their persuasive texts using a checklist to make sure that all essential features are included. Read through their work, checking for any grammatical errors, then write up their final account using ICT. Use downloaded images to illustrate their work.    Note  For an extra challenge, children could create an advertising campaign, taking responsibility for different elements. Children could read their work to parents and carers and ask the questions ‘What did you learn after reading my work?’ and ‘Have I persuaded you to do anything differently?’  En W C 2a Compose and rehearse sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2).  Co 5, 6, 7; En W C 3b, 4; Sc A 1, 2 |
| Science |  | Science  Identify body parts associated with the digestive system, such as mouth, tongue, teeth, oesophagus, stomach and intestine and describe their special functions.  Work in groups to handle and explore some of the organs of an animal’s digestive system including tongue, oesophagus, stomach (tripe) and small and large intestine. Then use the web and other non-fiction resources to determine the function of each digestive organ.    Note  Either source individual organs from a butcher or use anatomical models and video clips for the children to observe. Invite the school nurse or a local doctor to talk to the children about the organs and their functions. You may need to seek parental permission for handling animal organs. Be aware of and sensitive to children’s cultural and religious observances regarding animals.  Sc A 1 Describe the simple functions of the basic parts of the digestive system in humans.  En R C 1c, 3; Co 6, 7  Science  Identify similarities/ differences/ changes when talking about scientific processes.  In groups, research and compare the digestive system of a human with that of either a cow, rabbit, lion, chicken, owl, snake, horse, fly, snail or koala. Notice key similarities and differences in size and the number of main organs. Report back their discoveries to the class, giving reasons for the differences – particularly those relating to diet.    Note  These animals have very different digestive systems. For example, chickens have no teeth and therefore swallow small stones and grit that pass into the gizzard with the food they eat. Along with the muscular action of the gizzard, the stones grind down the food before it passes into the intestines.  Sc WS 8 Identify differences, similarities or changes related to simple scientific ideas and processes.  Sc A 1; En SL 6, 9  Science  Use and begin to create  simple keys.  Read The Story of the Little Mole who knew it was None of his Business by Werner Holzwarth and Wolf Erlbruch. Talk about the characteristics of the different animals’ poo and then match pictures of animal poo to a picture card of an animal. Construct a classification key for the identification of an animal by its poo. Use simple ‘yes’ and ‘no’ questions such as ‘Is it brown? Can you see fur in it? Is it wet or dry?’    Note  You could start with three or four very different looking poos such as bird, cow, dog and rabbit. As the children become more skilled in developing classification keys they can increase the number of poos they classify! This might also be an opportunity to talk about different words used for waste matter. Which ones might be used in a science laboratory, a doctor’s surgery or by their families at home?  Sc WS 5 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.  Sc WS 4  Science  Make decisions about different enquiries, including recognising when a fair test is necessary and begin to identify variables.  Investigate whether beans really do make you ‘windy’! Make up two identical bowls of food. Add a glass of water to both bowls and mix. Add a tin of baked beans to just one of the bowls. Cover the bowls with cling film to form a tight seal and leave somewhere warm for a couple of days. Observe which bowl produced the most gas and explain why.    Note  The cling film on the bowls will be pushed upwards, making a dome. The more gas produced, the taller the dome.  Sc WS 2 Set up simple practical enquiries, comparative and fair tests.  Sc WS 6  Science  Identify, with help, changes, patterns, similarities and differences in data to help form conclusions.  Explore how burps occur. Working in pairs, choose one partner to drink a small amount of carbonated water quite quickly before lying down flat on the floor. After a couple of minutes, sit up (they will feel the need to burp!) Describe to their partner the feeling of needing to burp and the noise it makes? Swap places and try again to see if they get the same results.    Note  Give each pair of children a balloon, asking them to try to recreate the noise of the burp and to describe how the balloon models burping. Children could make their own listening devices from funnels or card cones to help them listen to each other’s stomachs. Let them describe the noises they hear and explain what they think is happening.  Sc WS 9 Use straightforward scientific evidence to answer questions or to support their findings.  En SL 4; Sc WS 1, 2; Sc A 1 | | Science  Make decisions about different enquiries, including recognising when a fair test is necessary and begin to identify variables.  Investigate how effectively they brush their own teeth. Bring in their toothbrushes and after brushing, chew a plaque-disclosing tablet and check how much coloured plaque remains! Brush their teeth again to remove the remaining plaque. Suggest how a partner could improve their brushing.    Note  Plaque-disclosing tablets can be bought very cheaply from high street pharmacies.  Sc WS 2 Set up simple practical enquiries, comparative and fair tests.  Sc WS 3, 4, 6, 7, 8, 9; PSHE 3bScience  Make systematic and careful observations.  Investigate the effects of different drinks on a tooth-like substance. Place individual eggs (or eggshells) into beakers containing a range of different liquids including fruit juice, full sugar and sugar-free fizzy pop, milk, water and coffee or tea. Observe what happens over the course of the week, comparing the eggs from the different liquids and recording their findings in a photographic diary.    Note  Eggshell and tooth enamel both contain calcium carbonate, which dissolves in acidic conditions. During the investigation, the eggshells may dissolve and break down while others may become stained. Can any of these stains be removed by brushing with toothpaste?  Sc WS 3 Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.  Sc WS 2, 4; Co 6 | Science  Identify the different types of teeth and their functions, including how these vary from animal to animal and animal to human.  Use models and real examples of teeth to find out about the four main teeth types – incisors, canines, premolars and molars. Annotate diagrams of the four types, using labels and captions to describe the characteristic shape, size, parts and function of each one. Draw a cross-section of a tooth to show its different parts including pulp, enamel, blood vessels, nerve and dentine.    Note  Oversized and cross-sectional models of teeth are available from educational suppliers.  Sc A 2 Identify the different types of teeth in humans and their simple functions.  Sc WS 4; AD 2; En W C 2d  Science  Identify similarities/ differences/ changes when talking about scientific processes.  Take dental impressions of their own teeth by folding a small styrofoam plate in half, placing the fold into the mouth and biting down hard. Label the top half ‘maxilla’ and the bottom half ‘mandible’. Identify the tooth types from the impressions and describe the characteristic patterns they make. Compare their impression with a partner’s and consider any similarities and differences.    Note  Ask a small number of children to leave a bite impression in a fudge-type sweet or chunk of cheese. Challenge the children to identify the ’biter’ using their styrofoam impressions.  Sc WS 8 Identify differences, similarities or changes related to simple scientific ideas and processes.  Sc A 2; Sc WS 1, 2, 4 | Science  Choose appropriate ways to record and present information, findings and conclusions for different audiences (e.g. displays, oral or written explanations).  Use wall and dental mirrors to count their teeth, noting down tooth type, number and relative size. Find out how many of their teeth have been replaced with adult teeth. Use charts and graphs to display class data. Check the same data for a younger sibling or parent and describe how the results differ. Find out what other features can they see in their mouths, such as papillae on their tongues or the dangly uvula.    Note  Children could find out about the code used by dentists during a dental check-up and use this (or one they have devised themselves) when counting their own teeth. For example they might code a milk tooth as ‘M’, an adult tooth as ‘A’ and a gap as ‘G’. Alternatively they could use a more complex code that identifies both the tooth type and whether they are milk (lowercase) or adult (uppercase) teeth such as ‘I’ (adult incisor), ‘c’ (milk canine) or ‘P’ (adult premolar).  Sc WS 5 Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.  Sc A 2; Sc WS 3  Science  Make systematic and careful observations.  Think carefully about how different teeth help them to eat. Examine a range of foods and test to see which teeth are best suited for chopping, tearing and grinding. Record their results in a table and compare results.    Note  Provide an array of foods for the children to test such as marshmallows, apple, biscuit, lettuce, bread, grapes and cooked chicken. Ask the children to describe the problems they might encounter if they had no teeth at all!  Sc WS 9 Use straightforward scientific evidence to answer questions or to support their findings.  Sc A 2; Sc WS 4, 5 | Science  Choose appropriate ways to record and present information, findings and conclusions for different audiences (e.g. displays, oral or written explanations).  Play a game of ‘Draw something’. Create games cards, each showing three words of increasing difficulty and related to the project, such as ‘tooth’, ‘chew’ and ‘masticate’. Select a volunteer to choose a word and draw it on the whiteboard. Award one gold coin for identifying the easiest word, two for the mid-level word and finally three for the hardest one.    Note  Children could play the game in smaller groups. Words on the cards might include incisor, canine, premolar, molar, chew, saliva, enzyme, bolus, masticate, swallow, stomach, small intestine, bile, large intestine, poo, faeces and anus. Although watch out for those last three suggestions!  Sc WS 4 Gather, record, classify and present data in a variety of ways to help in answering questions.  Sc A 1, 2; En SL 1, 2, 4, 5 |
| Music |  |  |  |  |  |  | Music  Shape composition, considering dynamics, timbre and tempo.  Write a funny class song about bodily functions! Use a traditional tune such as Pop Goes the Weasel and fit new lyrics to the rhythm and tune. After writing their song, practise singing along and suggest sound effects to add to the fun!    Note  Make the song as funny as you like. The children are sure to remember any yucky or funny lyrics!  Mu 2 Improvise and compose music for a range of purposes  using the interrelated dimensions of music.En SL 9; En R C 1f; En W C 2a |
| R.E. | Incarnation  Making sense of the text.  What is Trinity?  Symbolism of water  Baptism of Jesus by John the Baptist. | Incarnation  Making sense of the text.  What is Trinity?  The Grace  Exploring Trinity further. The big story and Trinity | Incarnation  Understanding the Impact  What is Trinity?  Baptism | Incarnation  Understanding the impact.  What is Trinity?  Baptism | Incarnation  Making connections  Baptism – prayer trinity.  How can we see God as 3 in one?  What is Trinity? | Incarnation  Making connections  What is Trinity?  Hard, harder, hardest. | Incarnation  Digging deeper.  What is Trinity? |
| P.E – cornerstones. | NUFC – attack and defense  Commando Joe  Swimming at Wentworth | NUFC – attack and defense  Commando Joe  Swimming at Wentworth | NUFC – attack and defense  Commando Joe  Swimming at Wentworth | NUFC – attack and defense  Commando Joe  Swimming at Wentworth | NUFC – attack and defense  Commando Joe  Swimming at Wentworth | NUFC – attack and defense  Commando Joe  Swimming at Wentworth | NUFC – attack and defense  Commando Joe  Swimming at Wentworth |
| PHSCE | Y3/4 R2: To recognise what constitutes a positive relationship and develop the skills to form and maintain positive and healthy relationships.  Y5/6: R10 What makes a healthy and happy relationship? To listen and respond respectfully to a wide range of people, to feel confident to raise their own concerns, to recognise and care about other peoples feelings and to try to see, respect if necessary – constructively challenge others’ points of view. | PSHE  Identify some factors that affect emotional health and well-being (e.g. exercise or dealing with emotions).  Learn about good toilet habits and personal hygiene. Use scenarios to consider how best to prevent the spread of germs. Scenarios could include not washing hands after using the toilet, not drying hands thoroughly after washing and putting the toilet lid down before flushing. Devise a list of golden rules for the class.    Note  Encourage the children to consider how easily germs are spread and how good hygiene requires everyone to observe the same rules.  PSHE 3b Recognise that bacteria and viruses can affect health and that following simple, safe routines can reduce their spread.  PSHE 3a; En SL 1, 4; Sc A 1 | Y3/4: R3. to recognise ways in which a relationship can be unhealthy and whom to talk to if they need support  Y5/6: R11 To work collaboratively towards shared goals.  Y5/6: R12 to develop strategies to resolve disputes and conflict through negotiation and appropriate compromise and to give rich and constructive feedback and support to benefit others as well as themselves. | Y3/4: R4 to recognise different types of relationships, including those between acquaintances, friends, relatives and families.  R5: that civil partnerships and marriages and examples of a public demonstration of the commitment made between two people who love and care for each other and want to spend their lives together and who are of the legal age to make that commitment.  Y5/6: R13. that differences and similarities between people arise from a number of factors, including family, cultural, ethnic, racial and religious diversity, age, sex, gender identity, sexual orientation, and disability (see ‘protected characteristics’ in the Equality Act 2010) | Y3/4: R6. that marriage is a commitment freely entered into by both people, that no one should marry if they don’t absolutely want to do so or are not making this decision freely for themselves  Year 5/6: R19. that two people who love and care for one another can be in a committed relationship and not be married or in a civil partnership  R20. that forcing anyone to marry is a crime; that support is available to protect and prevent people from being forced into marriage and to know how to get support for them self or others  R21. to understand personal boundaries; to identify what they are willing to share with their most special people; friends; classmates and others; and that we all have rights to privacy | Y3/4: R7. that their actions affect themselves and others  R8. to judge what kind of physical contact is acceptable or unacceptable and how to respond  R9. the concept of ‘keeping something confidential or secret’, when they should or should not agree to this and when it is right to ‘break a confidence’ or ‘share a secret’  Y5/6: R14. to realise the nature and consequences of discrimination, teasing, bullying and aggressive behaviours (including cyber bullying, use of prejudice-based language, ‘trolling’, how to respond and ask for help)  R15. to recognise and manage ‘dares’  R16. to recognise and challenge stereotypes  R17. about the difference between, and the terms associated with, sex, gender identity and sexual orientation  R18. how to recognise bullying and abuse in all its forms (including prejudice-based bullying both in person, online and through social media) | PSHE  Identify some factors that affect emotional health and well-being (e.g. exercise or dealing with emotions).  Using the information gathered during the project, write a pledge to their gut promising to improve their digestive health and how they’ll do it. Read their pledges aloud to others and take them home to share with parents.    Note  Encourage children to express their ideas to others, explaining why they need to make those changes. For example, ‘I pledge to do some physical exercise every day. I need to do this because I don’t do any at the moment and that can make my gut slow!’  PSHE 3a Know what makes a healthy lifestyle, including the benefits of exercise and healthy eating, what affects mental health, and how to make informed choices.  PSHE 3b; En W C 3a |
| French  Year 3/4 | Recap: | Numbers 11-20  Understanding simple instructions: ecoutez, repetez, asseyez vous, levez vous, touches, silence, Attention, rangez voz affaires, je peux aller aux toilettes, voila, merci, s’il vous plait. | Responding to a song in French.  To learn body parts: la tete, le nez, deux yeux, des oreilles, la bouche, le cou, l’eppaules, genoux, pied, la bras, la jambe etc. Sing heads, shoulders, knees and toes in French. | Classroom objects: | Making a game Est-ce qu’on peut jouer au..? ” (Can we play…?)  C’est à qui ? (Whose turn is it?)  C’est à moi (It’s mine)  C’est à toi (It’s yours)  C’est parti (We’ve started)  À tour de rôle (Taking turns)  À ta gauche (To/on your left)  À ta droite (To/on your right)  Vous êtes prêts ? (Are you ready?)  On est prêts (We’re ready)  Qu’est-ce que tu as dit ? (What did you say?)  On peut continuer ? (Can we continue?) | | |
| Year 5/6 | Recap: | Saying what you can do well: Je joue bien au football. Je nage, bien, je danse, je chante, je lis.  Je peux….?  S’il te plait.  Celebrating achievements and special occasions. | Months of the year. Janvier, fevrier, mars, avril, mai, juin, juillet, aout, septembre, octobre, novembre decembre. | Classroom objects | Joyeux Noel  Writing a Christmas card  Christmas food words.  Christmas celebrations in France. | | |
| Computing | Computing  Use and combine a variety of software and internet services on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.  Upload an image of themselves with a big, toothy smile into a drawing software package. Use the tools to manipulate the images, discolouring and blacking out some of their teeth. Print the ‘before’ and ‘after’ images then discuss how the ‘after’ images make them feel.    Note  Show the class real images of decayed teeth to help make their images look authentic. Discuss what might have caused the tooth decay shown in the real images.  Co 6 Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.  PSHE 3a, 3b, 5d |  | Computing  Design and write programs that accomplish specific goals, working with variables for input and output.  Create a flow diagram (or algorithm) that illustrates the process of digestion from mouth to gut, showing the clear and sequential steps that eventually produce faeces.    Note  Before starting, ask the children to sort a series of cards, showing diagrams of the digestive organs or processes, into their correct order. These diagrams can then be used to inform their algorithms. Provide a list of key words for them to use.  Co 2 Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.  Sc A 1; En R C 2a |  |  |  | Computing  Use and combine a variety of software and internet services on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.  Make a video to present their working digestive system model. Write a script, clearly and concisely describing each organ in the system and the key processes at work. Use the appropriate scientific terms wherever they can! Edit the video using simple editing software such as Movie Maker.    Note  Encourage the children to allocate filming roles such as director and sound engineer. Children could work in groups to edit the footage using their own ideas and skills. Hold a showcase event to view all the different films.  Co 6 Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.  En W C 2a, 2b; Sc A 1 |
| Design and Technology | D&T  Measure and weigh ingredients appropriately to prepare and cook a range of savoury dishes.  Adapt popular recipes to make healthier snack options. Make vegetable wedges instead of chips and cakes flavoured with fruit or citrus rind instead of sugar. Put the foods to the test describing how they taste and which they prefer.    Note  Use the web and cooking magazines collected from home to search for appropriate recipes and vote on the ones they would like to make.  DT CN 2 Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.  DT CN 1; Co 5, 6, 7; PSHE 3a | D&T  Make healthy eating choices and explain why.  Find out which foods contain the most sugar by studying packaging and labels. Focus in particular on foods sold as healthier options. Discuss their intake of sugary food and drink suggesting tooth-friendly alternatives.    Note  Children could look at the foods that they have in their packed lunches or school dinners; some of the results may shock them! Explain that bacteria in our mouths like to feed on deposited sugars on our teeth. As they feed they produce an acid which erodes the tooth’s surface eventually leading to cavities and decay.  DT CN 1 Understand and apply the principles of a healthy and varied diet.  PSHE 3a, 3b; Co 5, 6, 7  D&T | Collect information from a number of different sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind fitness for purpose and the end user.  Model how the digestive system produces poo! Start with a basic meal such as tinned spaghetti on toast. Blend or mash the meal with a bit of water and detergent (saliva) to recreate the action of chewing.  cup of vinegar (stomach acid) and blend again. Add a dash of red, green and yellow food colouring (bile), blend to mix, then add the entire contents to one leg of a pair of tights which has a small hole cut in the end. Squish and squeeze the contents to allow water to pass through the mesh. Squeeze the remaining ‘undigested’ material through the small hole (anus). How realistic is the poo?    Note  Ask the children to consider what happens to the system when a person is constipated or has diarrhoea. |  | D&T  Cut internal shapes.  Make a wearable digestive system! Working in pairs or small groups, use a black marker pen to draw a complete digestive system on a white apron or large white T-shirt. Add colour and texture using fabric paints, stitching techniques, wadding, textile pens and embellishments to make the organs of the digestive system look realistic.    Note  This activity could also be done using a cardboard box with holes for the wearer’s head and arms.  DT M 1 Select from and use a wider range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing), accurately.  DT M 2; DT D 2 |  | D&T  Measure and weigh ingredients appropriately to prepare and cook a range of savoury dishes.  Make ‘snack packs’ containing healthy options that support digestive health and sell them at the school tuck shop or at a ‘pop-up shop’. Use a range of ingredients to fill small snack bags in interesting combinations. Use a spreadsheet to cost out their ingredients and calculate a cost-effective selling price per bag. Decide whether they want to be a profit-making enterprise or a cost-recovery health campaign.    Note  Snack pack ingredients might include bran flakes, berries, sunflower seeds, low-sugar cereals, apple slices, carrot sticks, sliced raw vegetables and banana slices.  DT CN 2 Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.  Co 6; Ma M 4; DT D 1; DT TK 4; DT E 1; PSHE 3a |