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| Educate Together schools | Parklandset | Weston super Mare  **Subject Leader Plan 22/23**  **Intent and the intended end points for this subject including key messages from whole school curriculum Intent**. |
| **Intent:**  We aim to provide a high quality science education that provides children with the foundations they need to recognise the importance of Science in every aspect of daily life.  Our curriculum will enable children to become enquiry based learners collaborating through researching, investigating and evaluating experiences. It will encourage respect for living organisms and for the physical environment.  Teachers will ensure that all children are exposed to high quality teaching and learning experiences. These will hook the children’s interest, enabling them to develop a sense of excitement and curiosity about natural phenomena. They will be encouraged to ask questions about the world around them and work scientifically to further their conceptual understanding and scientific knowledge.  Children will be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes. It will provide opportunities for the critical evaluation of evidence and rational explanation of scientific phenomena as well as opportunity to apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data. Children will be immersed in key scientific vocabulary, which supports in the acquisition of scientific knowledge and understanding.  Science at Parklands Educate Together is taught on a weekly basis from Foundation stage through to Year 6. By the end of Key Stage 2 pupils should be able to   * Develop scientific knowledge and conceptual understanding through biology, chemistry and physics. * Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them. * Are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.   **Through high quality teaching, we aim to develop the following essential characteristics of scientists:**  **Implementation**  We implement a curriculum that is progressive throughout the whole school.  Our children begin their science experience in Early Years Foundation Stage, with informal investigation within the setting. Teachers facilitate children’s curiosity with open ended questions and clearly thought-out learning experiences which are both child led and adult led.  In KS1, children continue to build on their science knowledge with more formal weekly science lessons where they are taught to use the following practical scientific methods, processes and skills: asking simple questions and recognising that they can be answered in different ways; observing closely, using simple equipment; performing simple tests; identifying and classifying; using their observations and ideas to suggest answers to questions and gathering and recording data to help in answering questions.  Moving in to KS2 children, are to use the following practical scientific methods, processes and skills: asking relevant questions and using different types of scientific enquiries to answer them; setting up simple practical enquiries, comparative and fair tests; making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers; gathering, recording, classifying and presenting data in a variety of ways to help in answering questions; recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables to report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions; using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions; identifying differences, similarities or changes related to simple scientific ideas and processes and using straightforward scientific evidence to answer questions or to support their findings.  At Parklands we provide a variety of opportunities for Science learning inside and outside the classroom. We allow time for lessons to enrich children’s vocabulary, immerse them in the topic, for children to make enquiries, ask questions and enjoy the learning. Educational visits are another opportunity for the teachers to plan for additional science learning outside the classroom. We will give the children engaging schemes of work which meet the needs of all learners and facilitate engagement and progress for all. Children will be given opportunities to discuss what they already know and what they would like to know. They will be exposed to a rich vocabulary that progresses throughout their years at school. Children will be encouraged to try new things, make mistakes and learn new skills.  In order to ensure that children develop the appropriate skills Parklands Educate Together has a year by year progression plan. |