Springfield School

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| Blackbirds Class Medium Term Planning for Science 1 | |
| Topic: North and South America and A Summer of Sport | Vocabulary: Rock  Clay  Hard  Erosion  Soil  Fossil  Igneous  Metamorphic  Sedimentary |

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| **Lesson 1 ‘link it’**  **How Rocks become soil**  Exposition – How rocks become soil  Groups- To explore how rocks become soil. Crumble biscuits into rubble to demonstrate  Plenary – Share work. | **Lesson 2 ‘learn it’**  **Erosion – visit**  Visit Dovedale to look at the effects on erosion. | **Lesson 3 ‘learn it’**  **Erosion – visit**  Record your observations from Dovedale to identify at the effects on erosion. | **Lesson 4 ‘learn it’**  **Layers of Soil**  Exposition – Explore the different layers of soil  Groups – To create layers of soil in a bottle to demonstrate the different layers  Plenary – Share work. |
| **Lesson 5 ‘learn it’**  **Lesson 5 ‘learn it’**  **Different types of soil**  Exposition – Explore different kinds of soil  Groups – To explore and identify the different kinds of soil – name and label  Plenary – Share work. | **Lesson 6 ‘learn it’**  **Lesson 6 ‘learn it’**  **Different types of soil**  Exposition – Explore different kinds of soil  Groups – Complete experiment to see how quickly water passes through each kind of soil  Plenary – Share work. | . |  |

Take the objectives for the LO stickers from this section

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| Substantive Knowledge (Content) | Disciplinary Knowledge (Skills) |
| **Observing and Measuring Changes**  **Children can:**  a make systematic and careful observations;  b observe changes over time;  c use a range of equipment, including thermometers and data loggers;  d ask their own questions about what they observe;  e where appropriate, take accurate measurements using standard units using a range of equipment.  **Identifying, Classifying, Recording and Presenting Data**   |  | | --- | | 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.  **Children can:**  **a** talk about criteria for grouping, sorting and classifying;  **b** group and classify things;  **c** collect data from their own observations and measurements;  **d** present data in a variety of ways to help in answering questions;  **e** use, read and spell scientific vocabulary correctly and with confidence, using their growing word reading and spelling knowledge;  **f** record findings using scientific language, drawings, labelled diagrams, keys, bar charts and tables. | | * Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class. |

Progression of Learning

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| ‘Link It’ | ‘Learn It’ | ‘Check It’ | ‘Show It’ | ‘Know It’ |
| Previous learning of pupils   * Knowledge of rocks * Observations of rocks in the immediate environment | Activities provided during lesson  Resources  **PPTs**  **Pictures**  **Seeds**  **Plants**  Activities to explore –  - pictures of rocks  - rocks | Independent activities linked to lesson  Resources  **PPTs**  **Books**  **Pictures**  Activities-  -Rocks  - Pictures of rocks  Opportunities to demonstrate knowledge | How will the pupils share knowledge during or end of lesson  **Explore and discuss photographs of lessons**  Share and compare work | Retrieve or generalization of learning after lesson   * Understand how rocks are formed * Understand the different layers of rocks * Demonstrate some knowledge of rock formation and erosion |