**Soils**

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| The property of soils is affected by the:   * type of rock * size of rock pieces * amount of organic matter in it. | |
| **Peat** | - water-logged  - contains partially decomposed plant material  - soft and easily compressed |
| **Sandy soil** | - light and dry  - lots of air gaps so water drains through quickly |
| **Chalky soil** | - stony and water drains through quickly  **Words to describe the appearance of rocks:**  - found in areas with lots of chalk |
| **Clay soil** | - very sticky when wet  - a heavy soil  - water does not drain through it quickly |
| **Significant scientists** | |
| **Mary Anning**  *(1799-1847)* | Mary Anning was an English palaeontlogist and fossil collecter. She became known around the world for important finds she made in Jurassic fossil beds in Dorset. |

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| **Key vocabulary** | |
| **rock** | A naturally occurring material made of minerals. They can be different sizes:   * stones * pebbles * boulders |
| **fossil** | The bones or other remains of living things are sometimes preserved in rocks as fossils. |
| **soil** | Ground up rock mixed with plant and animal remains. |

**Fossil formation**

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| **Fossils were formed millions of years ago.** | | | | |
| **1** Plants and animals died and sank to the seabed. | | | **Animal fossil**    **Plant fossil** | |
| **2** The soft parts decayed away leaving the hard parts. | | |
| **3** The hard parts were covered and squashed by many layers of sand and other materials. | | |
| **4** The animal/plant matter dissolves and is replaced by minerals, leaving a replica of the original bone called a fossil. | | |
| **What will I learn during this topic?**  I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.  I can describe in simple terms how fossils are formed when things that have lived are trapped, within rock.  I can recognise that soils are made from rocks and organic matter.  **Types of rocks**  **Sedimentary** | | |
| **sandstone** | **limestone** | |
| **chalk** | Chalk is used for drawing because it is crumbly and soft. | |
| **Metamorphic** | | |
| **quartzite** | **slate** | |
| **marble** | Marble is good for gravestones because it does not rub away. | |
| **Igneous** | | |
| **basalt** | **pumice** | |
| **granite** | Granite is good for worktops because it is hard and does not absorb water. | |