

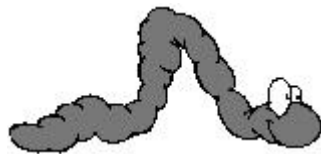
**PROVISIONAL PROGRAMME**

**Rocks investigation**

- Introduction to igneous, sedimentary and metamorphic rocks.
- Identify rocks from texture and appearance using keys.
- Test rocks for hardness and permeability.
- Time Line – Discover when local chalk and flint were formed in comparison to other historical events. Discuss our use of natural resources and future consequences.

**Soils investigation**

- Solve a crime at Amersham – who left the muddy footprints?
- Describe the components of soil
- Children are presented with soil samples and asked to compare soils by:
  - texture
  - measuring water content using scales
  - looking at particle size using graded sieves
  - separating soil in a jar of water



**LEARNING OUTCOMES**

*most children will (N.C. Level 3/4) :*

- identify some rocks e.g. marble, granite and slate
- group rocks according to differences in texture
- use results to rank rocks in order of ease of wearing away and/or permeability
- describe how soils differ
- separate particles using the equipment provided and be able to describe the process

*some children will not have made so much progress and will (N.C. Level 3):*

- name one or two rocks
- recognise that different rocks may have different textures and properties in regard to durability and permeability

*some children will have progressed further and will also (N.C. Level 4):*

- group rocks according to differences in texture, and record and justify the groupings
- offer explanations for why different rocks are used for different purposes

**SAFETY** All activities and sites are risk assessed. Adult: child ratio of 1:6.

**CLOTHING** Appropriate outdoor clothing. Indoor & outdoor footwear/wellies.

**BEHAVIOUR** Teachers are responsible for good behaviour & lunchtime supervision.

**NAME LABELS** If possible please provide children with name labels.

**SHOP** Pocket money for shop.

**RESOURCES** All resources are provided.

**ICT** Use of digital cameras to record the day's activities.

**ASSESSMENT**

Progress assessed by open-ended questioning, ongoing peer discussion, comparing results and plenary sessions, including AfL games.

**PRIOR LEARNING**

There are different types of rocks with different characteristics. Review understanding of naturally occurring materials.

**FUTURE LEARNING**

Scientific investigation skills and developing a fair test.