Ancient Art Practical

Key Stage 2

Scheme of work unit: 3C Characteristics of materials

3D Rocks and soils

(Can also be related to Art & Design Unit 3B)

Intended learning: 3C Children should extend their knowledge of the

range of materials we use and of the properties that characterise them. This knowledge should help them recognise what needs to be considered when a material is chosen for a particular use.

Children should come to recognise that underneath all surfaces is rock that they may not be able to see. That rocks get broken down into pebbles and soils, which we can often see. That there are different sorts of rock with different characteristics. Pebbles and soils from different

rocks consequently have different

characteristics.

- Discuss with children how they think cavemen painted pictures on their cave walls.
- Invite them to give ideas about what they would use for paints, brushes etc.
- Compare and contrast the colours obtained naturally with the man-made pigments available today.
- Explore how a caveman might "lighten" the colours he was using.

Information:

- Cave paintings have been found throughout the world, from dark limestone caves in the South of France to rock shelters in Zimbabwe.
- Cavemen had limited knowledge about pigments, and few tools with which to make them. So they used the minerals around them to obtain colours.
- They would grind the minerals to a fine powder, and then use saliva, ear wax or animal fat to make the paint stick to the surface.
- They used chewed twigs as brushes.
- By the time of the Ancient Egyptian era, there were more colours available. These were made by heating natural materials.
- The Egyptians traded new brightly coloured minerals, such as Saffron. The Egyptians also developed better tools to grind them with.
- Egyptians found ways of extracting sap from plants, as well as using milk from cows to bind their pigments together to form paint.
- By Medieval times, people travelled and traded even more widely across Europe. A large variety of colours were now becoming available.

Resources Required:

For detailed information about sourcing the materials please see our resources sheet. For this experiment it is only necessary to have an example of a natural pigment and one of a man-made pigment.

• Natural pigment (Ancient): Iron Oxides (yellow, red)

Malachite Chalk Rock Ultramarine Blue Chalk Sticks

• Man-Made pigment (Modern): Powder Paints

• PVA Glue

• Eggs (Optional)

- Pestle & Mortar (if grinding is required)
- Plastic Cups
- Spoons
- Paint Brushes

Practical Notes:

If using eggs as a binder check that there are no allergies towards them. Care must be taken when grinding to avoid significant inhalation of any dust.

Further Work:

Children can make their own "cave chalk stick" using egg shells. Information about this is available on our website – www.creatingacolourfullife.com, under the experiments section. Relates to the concept that materials can be mixed together to form a new, usable item.

The ancient and modern paints that the children have made can be used to make a display, outlining what they have learned.

Answers:

- 1. Minerals and rocks
- 2. Spit, animal fat and/or ear wax.
- 3. Browns, dark oranges, dark reds.
- 4. Modern day paints are a lot brighter. Much wider selection of colours.
- 5. Paint pigment: Dry, fine powder, not sticky, solid. Binder: Very sticky, viscous, liquid.
- 6. Sap from plants and milk from cows.