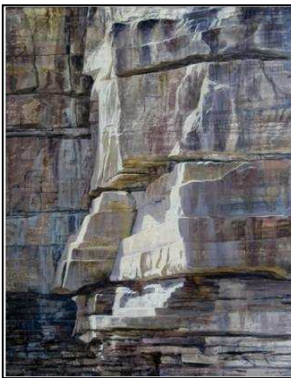


Geo-art: paintings to sculptures inspired by all things 'geo' Create your own geo-artwork

Artist Phil Entwistle writes, "John Ruskin wanted everyone to learn to draw. Not so that they could make pictures, but so that they could **see**. Drawing and painting, for him, were tools for investigating nature. He saw them as integral to scientific enquiry. Our human scale conditions how we see things. We notice the beach, not the grains of sand, we see fields, not continents. But the microscope and space exploration have broadened our choice of perspective far beyond the everyday, enabling us to see similarities of form and pattern at hugely different scales. Similarly, our lifespan limits our perception of processes. We see waves on the shore, but only occasionally in floods and landslides do we perceive the erosion of mountains; even less so the tectonic widening of the Atlantic at a rate of a few centimetres a year. Yet process and movement are no less real for being slow."

Show the pupils some photos of examples of artwork (paintings, sculpture, ceramics, textiles) that have been inspired by the natural world, a landscape, some rocks, rivers, volcanoes, minerals, fossils - - - . A few examples are given here.

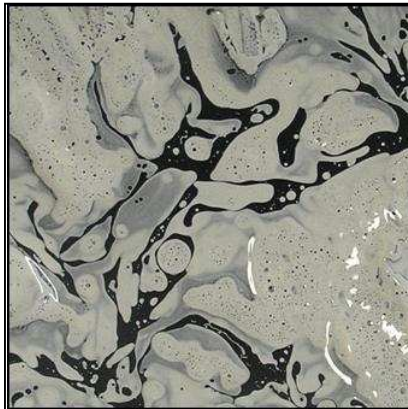


'Deltaic Sandstone' based on the Jurassic sandstone at Cloughton, North Yorkshire.

Oil painting by Phil Entwistle who says his love of science inspires his work

Paintings left and below are reproduced by permission from the artist <http://www.philentwistle.co.uk/>

An experiment with oil paint and Indian ink by Phil Entwistle. He is trying to express the sense of Earth's restless, continual change. He uses gravity, tilt and flow rather like the processes that form the landscape.



'Mull 1' by Karen Picton

The mud for this painting was collected from one area on the island of Mull. The little stones were collected from Iona and include a variety of beautiful colours along with tiny shells.

Reproduced with permission from the artist <http://karenpicton.com/>

Cup with Dragon Handles
12th Century Chinese
Carved from Jade (variety nephrite),
a natural mineral
Walters Art Museum
This file is licensed under the
Creative Commons Attribution-Share
Alike 3.0 Unported licence



Covered Bowl in the shape of a Duck, c.1600
Carved in quartz (rock crystal),
a natural mineral
Walters Art Museum
This file is licensed under the
Creative Commons Attribution-Share
Alike 3.0 Unported licence

'Dioptase'
Born in Toronto, artist Carly Waito is known for her elegant artworks and sculptural installations inspired by the natural world. With a focus towards geology, geometry and light, she paints in oil the complexities of crystals and gems visible only on close inspection. Reproduced with permission from the artist <http://www.carlywaito.com/wp/>



Ask the pupils:-

- working in small groups to choose two examples of artwork inspired by any aspect of Earth science or created from any natural material. Describe how the artist has used the natural environment to create the artwork;
- to choose a topic they have studied in Earth science or geography and make a design for their own masterpiece. It could be:-
 - painting: water colours, oils, mud or soil
 - drawing: pen & ink, charcoal, scientific
 - collage of natural materials
 - sculpture (suggest the preferred natural material)
 - textile design
- in groups, discuss their creations;
- if possible, produce their pieces of work.

The back up:

Title: Geo-art; paintings to sculptures inspired by all things 'geo'.

Subtitle: Create your own geo-artwork.

Topic: Much of our great art was and is inspired by the natural world. This activity encourages pupils to create some imaginative artwork based on a topic they have studied in Earth science or geography. It creates a cross-curricular link between the sciences and arts.

Age range of pupils: 5 - 95 years.

Time needed to complete activity: 30 minutes in class but much longer to create the artwork.

Pupil learning outcomes: Pupils can:

- appreciate that much artwork is inspired by the natural world;
- appreciate that some artwork is made from material from the natural world, e.g. soil, pebbles and minerals like jade and quartz;
- describe some pieces of this type of artwork;
- realise that everyone knows something about the natural world;
- appreciate that everyone can create artwork;
- gain an insight into how much time and effort is expended on producing great art.

Context:

"Art and science are branches of the same tree."
(Albert Einstein)

This activity fits in well at the end of a topic where pupils can explore other aspects of the subject of study. It encourages creative thought and breaks down any barrier pupils may make between scientific, factual subjects and the arts.

Teachers may be interested in the book:-
'Geology and Art: Cross-curricular Links'
Jane Dove, Wiley Online Library.
<http://onlinelibrary.wiley.com/>

Following up the activity:

Pupils can use search engines to explore the topic 'Geology and Art' further and to find more examples. They could also try the Earthlearningidea 'Geoliterature'. <http://www.earthlearningidea.com>

Underlying principles:

- Much of our art has been inspired by the natural world.
- Art and geology have played important rôles in our lives since ancient humans lived in caves.
- All the raw materials for sculpture, architecture, ceramics, jewellery, glass-blowing and original colours for paints come from the Earth.
- Art and design can enhance the presentation of geology in displays and publications. Scientific illustrations can convey more information than photographs.

- Rocks, fossils, minerals, landscape (and geologists!) can provide subject matter and inspiration for artists.
- Earth materials can be used directly for making art, e.g. soil, pebbles and minerals.
- Rock exposures themselves can become artworks, e.g. buildings in the beautiful coloured sandstones of Petra in Jordan.

Thinking skill development:

Trying to interpret artwork shows construction. Discussion about the art involves metacognition. Turning a scientific topic into art is a bridging skill and is the aim of the activity.

Resource list:

- a good imagination
- access to the internet (optional).

Useful links:

'Blurring the line between Arts and Science'
by Sarah Henton De Angelis, Natural England
Earth Heritage Magazine, Issue 47
<http://www.earthheritage.org.uk/>
Balancing rock sculpture by Bill Dan:-
<https://www.youtube.com/watch?v=ZltqAdaYPQM>
Alan Spencer - ceramics
<http://www.columbusmakesart.com/artist/645-alan-spencer/>
Matthew Blakely - ceramics
<http://www.matthewblakely.co.uk/blog/>
Charles A. Borrell - abstract seascapes
<http://www.charlesborrell.com/>
Phil Entwistle - <http://www.philentwistle.co.uk/>
Karen Picton - <http://karenpicton.com/>
Carly Waito - <http://www.carlywaito.com/wp/>

Source: Elizabeth Devon of the Earthlearningidea Team inspired by the work of José Sellés Martínez who has written much material in Spanish - book chapters, articles for international and local journals, magazines and proceedings. He has organised many courses about Geology and Art. 'Volcanoes, an eruption of art' is one example.
http://www.earthlearningidea.com/PDF/An_eruption_of_art.pdf (8MB)

The Argentine Pampas is another example. This is 19 posters about the landscape of the Pampas and how it has been described by poets, painters and voyagers through time.
http://www.earthlearningidea.com/PDF/Argentine_Pampas_posters.pdf (10MB)

Material has also been used from various posts on the Geological Society of London blog -
<https://blog.geolsoc.org.uk>

Cross-curricular Earthlearningideas
Geo-art: paintings and sculptures inspired by all things 'geo'
Earthquakes and art: historic paintings of earthquakes
Geo-literature: poems and stories inspired by all things 'geo'
Geo-music: music inspired by all things 'geo'
Rocks music: create your own geo-instrument
Back in time: "Alligators spotted in London"

© **Earthlearningidea team**. The Earthlearningidea team seeks to produce a teaching idea regularly, at minimal cost, with minimal resources, for teacher educators and teachers of Earth science through school-level geography or science, with an online discussion around every idea in order to develop a global support network. 'Earthlearningidea' has little funding and is produced largely by voluntary effort.

Copyright is waived for original material contained in this activity if it is required for use within the laboratory or classroom. Copyright material contained herein from other publishers rests with them. Any organisation wishing to use this material should contact the Earthlearningidea team.

Every effort has been made to locate and contact copyright holders of materials included in this activity in order to obtain their permission. Please contact us if, however, you believe your copyright is being infringed: we welcome any information that will help us to update our records. If you have any difficulty with the readability of these documents, please contact the Earthlearningidea team for further help.

