Creative Kilns Columns & Cones

Created by Sarah-Jane Mason
for Rotherham Museums, Arts & Heritage

COLLABORATION - CREATIVE EXPRESSION – EXPERIMENTATION - EXPLORATION - MINDFULNESS

About

Outdoor learning provides us with the opportunity to explore the world around us and the hidden stories of our localities in ways which are creative, curious and fun. Our sites at Catcliffe Glass Cone, Keppel's Column and Waterloo Kiln offer unique environments for teachers and families to explore creative learning outside.

This pack is designed to support teachers and families in planning self-guided visits to these local heritage sites. Our specially-designed creative activities link to different areas of the curriculum and are organised into five themes; Creative Expression, Collaboration, Experimentation, Exploration and Mindfulness.

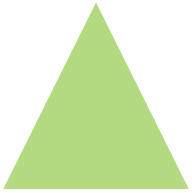
Some of the activities can be done at any of our sites and others are tailored specifically for one site, perhaps drawing upon the particular architecture of the monument or the landscape it is set in. You can tell if an activity is designed for a specific site as it will have a coloured shape behind the text; a green triangle for Catcliffe Cone, a blue rectangle for Keppel's Column and a red dome for Waterloo Kiln. All of the activities on a plain background (with no shape behind them) can be done at any of our heritage sites.

In addition, there are some activities which are also suitable for families. Family activities require minimal resources and are suitable for multiple age groups so they are great to use with siblings of different ages. These are identified with a blue circle behind the text. To see all of the identifying shapes and colours used throughout this pack, have a look at the key at the bottom of this page.

Teachers can create their own sessions for their class by selecting and combining activities from across the themes. The learning opportunities in this pack can be adapted for use with Foundation Stage through to Key Stage 3. Some activities require few or no resources, while others are more complex and will require preparation and materials. A full list of materials is provided with each activity so that you can decide what will best suit your needs and resources.

We hope that schools and families will enjoy visiting our sites, learning their history, exploring their landscapes and allowing creativity to flourish.

Keppel's Column



Catcliffe Cone

Waterloo Kiln

Family Activity

Visiting

We do hope that you can visit the sites alongside using this pack. The images in the pack help to give you an idea of what each site is like, but there truly is no substitute for seeing these marvellous monuments in real life.

When you are visiting the sites please bear in mind the following points to help you have a safe and productive visit.

- Please ensure that you leave the sites as you found them.
- Take all of your litter and/or unused resources away with you.
- Be aware that the sites are open to the public.
- We recommend that teachers do their own on-site risk assessment before they visit with a class.
- All sites require close supervision of children. Be especially mindful of the pottery ponds when visiting Waterloo kiln.
- We highly recommend outdoor clothing when visiting. The sites can get windy and wet and we don't want your visit ruined by being cold and damp!
- The interior of sites may be accessible to groups with a prior appointment. Please contact the learning team to discuss this further.

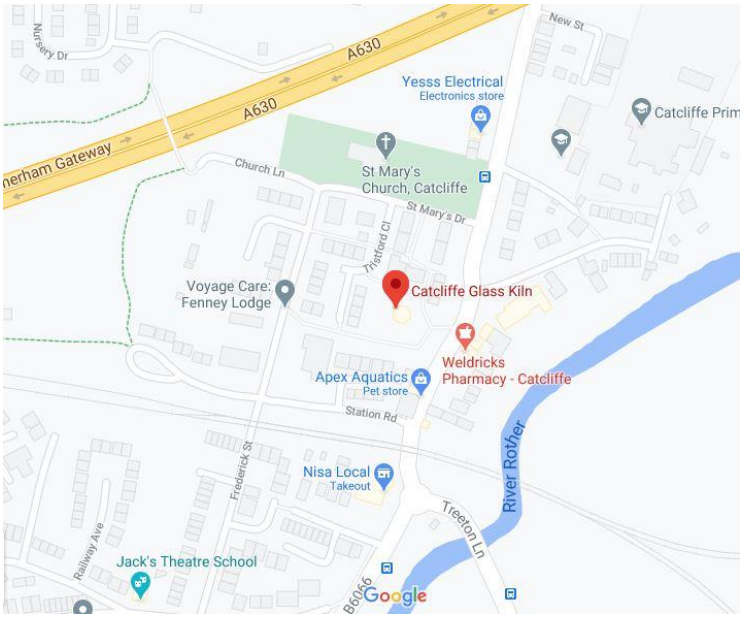
All of our sites are free to visit, without an appointment. However, if you would like to look at the interior of sites, you need to arrange this with the learning team in advance of your visit.

If you have any further questions about the sites or you would like to book a visit to the interior of the monument(s) please do so via the contact page on our website.

http://www.rotherhamheritagelearning.org.uk/

Catcliffe Cone

Catcliffe Glass Cone is a historically significant local monument and a key site in relation to the development of the glass industry in South Yorkshire. It dates from 1740 and remained in use until 1884, with a period of use c.1900-1. It is the earliest surviving Glass Cone of its type in Western Europe, and one of only six remaining glass cones in the UK.



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1. View of Catcliffe Cone from Rotherham Road

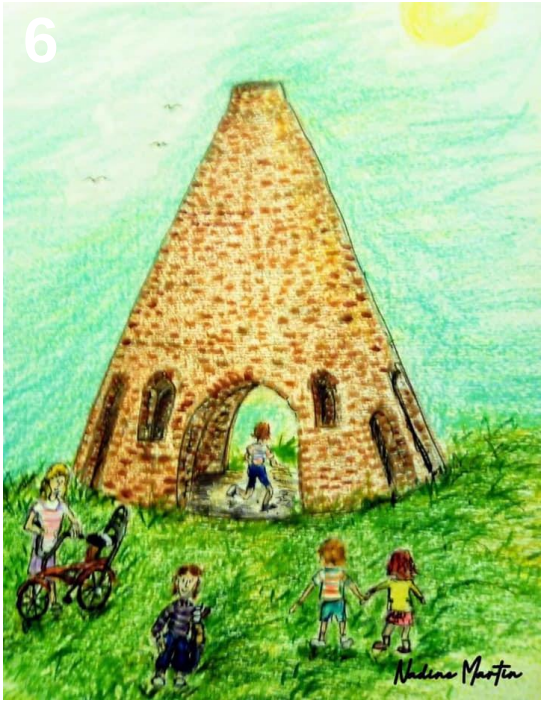
2. Looking up, inside the cone.

3. Looking up, outside the cone.

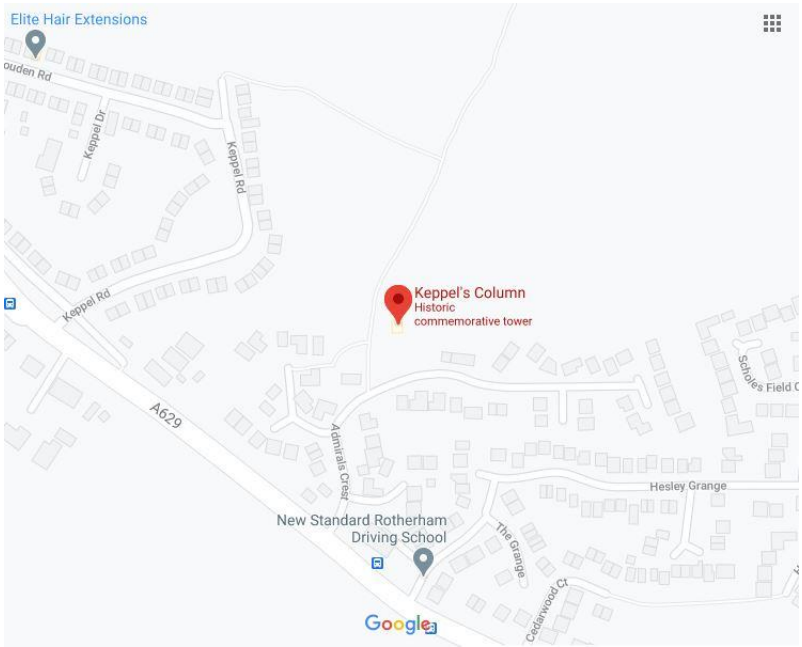
4. Model of the inside of Catcliffe Cone showing how it would have looked when it was a working glass kiln.

5. Inside Catcliffe Cone now.

6. Drawing by Nadine Martin.



Keppel's Column



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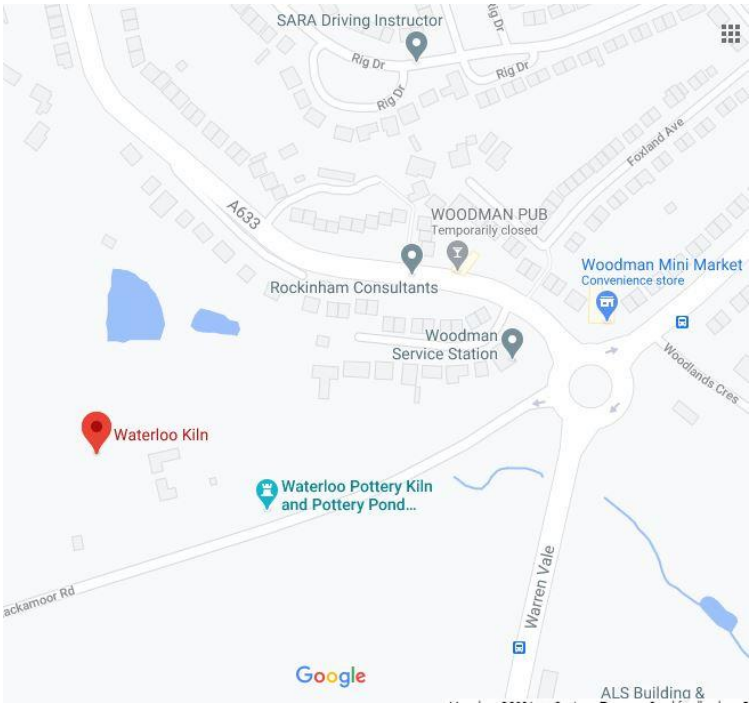
Keppel's Column was built between 1773 and 1780 and is situated on a prominent hill in Scholes adjacent to Scholes Coppice, an area of ancient woodland, overlooking Wentworth Woodhouse. Charles Wentworth 2nd Marquis of Rockingham commissioned the architect John Carr to build the monument to further enhance the landscape of the Wentworth estate and to celebrate the acquittal of Admiral Keppel.

1. View of Needle's Eye from Keppel's Column.
2. Looking up at Keppel's Column.
3. Keppel's Column in the snow.
4. Showing the unsuccessful entasis and the offset windows on Keppel's Column.

Waterloo Kiln

Waterloo Kiln is situated within the Pottery Ponds site on Blackamoor Road, Swinton. It is believed to be the only surviving 19th century pottery kiln in Yorkshire. It is one of the few places in the country representing the development from coarse earthenware for the local market, to fine porcelain and pottery for export. The pottery operated from 1745 - 1842; most significantly it operated as the internationally famous Rockingham Works from 1826.



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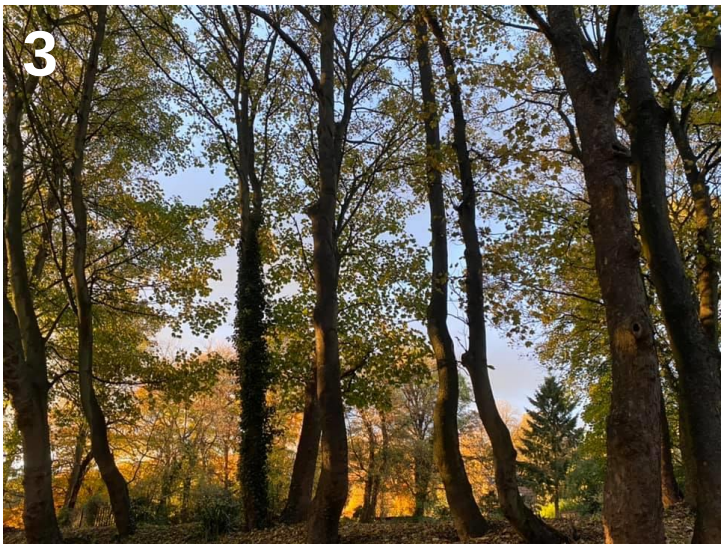


1. The pottery ponds by Waterloo Kiln in the Winter, showing a frozen surface.
2. The pottery ponds by Waterloo Kiln in the Summer, showing a golden sunset.
3. The woodland area around the pottery site that is filled with nesting birds.
4. Waterloo Kiln covered in a powder dusting of snow in the Winter.
5. A model showing how the inside of the kiln would have looked when it was producing ceramics.

Creative Activities

Materials: brown paper roll, charcoal

Work in groups of 5 for this observational drawing challenge. Find a great spot to view the monument or landscape you will be drawing. Roll out the brown paper and have 4 group members hold a corner each. The paper must be held tight enough so it can be drawn onto but not so tight that it rips with the pressure. The fifth group member is the first artist and has 1 minute to start the observational drawing. Every group member has one go at drawing and holds each of the corners. When it is time to switch artists, everyone moves clockwise one place.

Key Skills: communication, problem solving, resilience, team work, time management

Materials: newspaper and masking tape or spaghetti and marshmallows!

A folly is a building primarily built for decoration, but it suggests it has a purpose through its appearance. Keppel's Column is part of the folly system at Wentworth Estate. The system includes the Needle's Eye, the Hoober Stand and the Rockingham Monument. Can you find and visit them all? How are they similar/different? In small teams and using only the materials provided, build the tallest folly that looks like it has a purpose. Think carefully about the story behind what your folly is used for and how this is shown in its form (3D shape). Your folly must be free standing and able to stand for at least 5 minutes after it is completed. You have 30 minutes to construct your folly.

Key Skills: communication, creative thinking, problem solving, resilience, team work

Materials: collection bags (one per person or one per team), camera

Explore the landscape, picking up any litter that you find. Try to fill your collection bag before the time runs out. Form a small group and pool all of your litter together, then use this to create an in situ group collage. Consider how you can use the shapes, colours, textures and patterns of the materials you have collected. Maybe your collage could have an anti-littering theme? When the collage is complete, take a really good photograph of it before collecting up the litter and taking it for recycling. Please do not touch anything sharp like glass or broken cans, wear plastic gloves and wash your hands really well when you've finished.

Key Skills: communication, creative thinking, problem solving, resilience, team work

Materials: card or thick paper

Make an artists' palette by rubbing found objects like conkers, grass or soil onto card to reveal their natural pigments. Try and collect a full spectrum of colours from blues and greens to reds, oranges and yellows. Are any of the colours not what you expected from that object? Why could this be?

Key Skills: creative thinking, critical thinking, making connections

Materials: sheet of hard and clear plastic, whiteboard marker

Hold up your clear plastic sheet and use the whiteboard marker to draw what you can see through the plastic onto the plastic. Once your drawing is complete, move the plastic so you can see different views through our drawing. How does your drawing interact with what you can see now? What else could you 'direct draw' like this? A building? A person? A plant?

Key Skills: creative thinking, independent learning, making connections

Materials: camera (to photograph the installation)

Look around you on the floor and make a collection of natural materials. Organise your collection by colour, shape or size so that you can use them to create an installation collage. An installation is an artwork that belongs in a particular place and a collage is when we put lay different pieces out next to or on top of each other. Find the perfect spot for your installation, and then start arranging your materials. Think about how your arrangement links with the location. Could it go around a tree or down into a crack in a rock?

Key Skills: creative thinking, decision making, independent learning, making connections

Materials: found natural items eg. leaves, long grasses, sticks or twigs

All around the sites there are lots of birds nesting, making safe spaces for the families to live. Can you use found natural materials from the floor to make your own nest or den? Who will live there? How will it help to keep them dry, warm and safe?

Key Skills: creative thinking, critical thinking, independent learning, making connections

Materials: plastic carrier bags, masking tape, string

Go on a scavenger hunt for natural found objects such as sticks, leaves and conkers. Use these objects along with string, masking tape and old carrier bags to create props that move or make noise. Think about the things that you have found and how they happened to be there. Can you turn this into a story or drama? In small groups create a dance or movement piece that tells this story using your props to help create noise, movement and drama.

Key Skills: communication, creative thinking, making connections, team work

Materials: paper, pencil

Waterloo Kiln originally had a house right in front of it like in the picture shown here. What would have been the pros and cons of this? Draw an idea for a house design that combines a house with something else. Maybe you'd like to see a slide house or a windmill house? What would be great about living in your hybrid house?

Key Skills: creative thinking, decision making, independent learning, making connections.

Materials: egg box, colored pens or pencils, card

Time to go scavenging for found objects! Use an egg box and make a collection that focuses on one thing – it could be colour, texture, manmade or natural objects. Take a piece of card and a felt tip and draw around the outline of each of your objects. Think about how you arrange the outlines. Stacked? Overlapped? Edges touching? Do you need to use more than one colour felt tip?

Key Skills: decision making, independent learning, making connections

Materials: card, images of impressionist artwork (optional but may help explain the concept)

Make an artists' palette by rubbing found objects like conkers, grass or soil onto card to reveal their natural pigments. Create an Impressionist style artwork by working outside 'en plein air' to capture a part of the landscape or view. Use your artists palette as reference for colours and use the technique of rubbing colour onto card to replicate the daubs of colour the Impressionists used to create their paintings.

Key Skills: creative thinking, decision making, independent learning, making connections

Materials: paper, pencil, coloured pencils or pens

Architects use a technique called Entasis which uses a convex curve to make columns, spires, towers and pillars look straight even when they are actually getting thinner as they get taller.

Look carefully at the column, is it straight or curved? At Keppel's Column we only notice that the column is curved because it was not built as tall as originally planned so the trick doesn't work.

Create your own optical illusion by tracing around your hand on a piece of paper. Next use a ruler to draw equally spaced lines right across the page. Keep the lines straight in the background but curve them in the hand to make your hand look 3D.

If you want to go even further, use your coloured pencils in a repeated order between your pencil lines. It is important your keep the same order throughout the whole piece or like the column, the illusion will be ruined.

Key Skills: creative thinking, critical thinking, independent learning, making connections

Materials: coffee filters, felt tips, glass, pencil, water

Draw a thick ring around the centre of a coffee filter where the ridged part meets the flat circular centre. Use a pencil to write the colour of the marker being used in the middle of the flat circle. Fold the coffee filter into half and then half again to make a cone and place it in a short glass of water. Make sure that only the uncoloured tip of the cone sits it the water and not the coloured ring. Watch as the water travels up the filter and through the colour. What happens? Do you know why? This process of splitting colours is called Chromatography.

Key Skills: critical thinking, making connections, problem solving,

Spectrascope

Materials: cardboard tube, CD, scissors, scrap paper, tape

Make a Spectrascope and see if you can make rainbows. Please ask for adult help with cutting. 3cm from the bottom of a card tube cut a 45° slit on one side and on the opposite cut a wider peephole. You can see the peephole in the image below. Stick paper over the top of the tube and cut a thin slit right across the centre. Slot a CD into the angled slit, shiny side up. Point the top slit up at the sky (NOT directly at the sun). Look through the peephole. What do you see? How do you think this works?

Key Skills: critical thinking, making connections, problem solving

Materials: card, cyanotype paper, board, interesting objects, pencil, water

Let's make cyanotypes, prints made by the sun. Inside (away from the sun) place a piece of cyanotype paper on a thick board. Lay objects on top of it that have interesting outlines – feathers, leaves and flowers all work well or you could cut interesting shapes out of cardboard. Take your prepared paper outside to be printed by the light – if it is bright sun it can take as little as 2 mins if it is cloudy it will take longer. It is ready when it turns from a dark to a very light blue, almost white. Rinse the paper in clean water to set the print, hang it up to dry and watch the image come to life.

Key Skills: creative thinking, decision making, making connections

Materials: artworks you've already made

Look carefully at all of the art in your collection. How could you make an installation of your artworks using the landscape to help you with your display? Could your artworks stand in the crack of a rock, fit into the nook of a bush or be on the plinth-like stump of a tree? Think about the lines of the landscape and how they could influence your installation of artworks.

Key Skills: creative thinking, decision making, problem solving

Materials: camera (optional)

Using your arms and legs can you frame something special? Maybe this is a view into the distance, a tiny detail like a crack in the mud or something really unusual. If it is difficult to frame it alone, join up with a partner to create bigger frames. If you have a camera ask someone to take a picture.

Key Skills: communication, critical thinking, making decisions

Materials: clay or mud, plastic bag

Is mud shiny? Why not? Let's make a Dorodango and see if we can make mud shine! Hikaru Dorodangos, are a traditional Japanese craft made by children. Pack some mud into your hand, and squeeze out the water while forming a sphere. Add some dry dirt to the outside and continue to gently shape the mud into a sphere. As the mud begins to dry, pack it solid with your hands, and rub the surface until a smooth film begins to appear. Next pat and rub very fine, powdery, dust like dirt from the floor onto your ball. Seal the ball in a plastic bag for a few hours. Remove and pat more powdered mud onto the surface – repeat these steps until the ball is no longer moist at all. Finally, you can gently polish with a cloth until the sphere shines.

Key Skills: problem solving, resilience

Materials: artstraws or sticks, tape

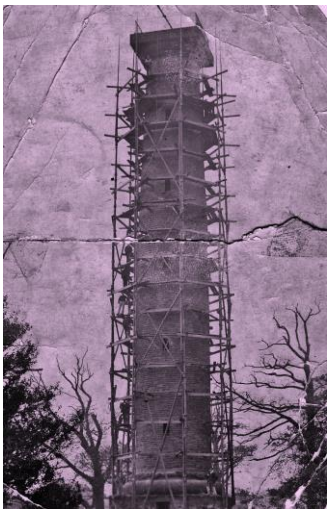
Frames are used in construction and architecture to make the start of something that then gets built on top of. The frame has to be very strong, long lasting and the right shape. What framework might have been needed underneath the Catcliffe Glass Cone, Waterloo Kiln or Keppel's Column? Using sticks and tape, try to build a frame for one of these forms. How could you cover it to make a model of the monument?

Key Skills: critical thinking, decision making, problem solving

Materials: card, holepunch, paper, pencil

Make a viewfinder by hole punching a hole in a piece of card. Use this as a viewfinder to focus your attention. Imagine you are only as tall as your thumb and then recreate your view using your viewfinder. Imagine how different everything would seem; would it be bigger, more exciting or even scary? Draw a picture of what you would see if you were this small.

Key Skills: creative thinking, critical thinking



Materials: card, paper, pencil, tin foil

Glass is often made reflective by adding a thin coat of shiny metal to one side making a mirror. Tin foil is like our mirror for this activity. First wrap the tin foil around the card so it is smooth and flat. Use it to reflect the cone and the houses around you and draw what you can see. Next, crinkle up the foil so that it is crumpled and repeat the looking and drawing. What is the same and what is different? Which reflections do you prefer and why?

Key Skills: creative thinking, making connections

Materials: none required

Play a game of 'Shadow Chasing.' One person is the shadow chaser. Everyone else tries to protect their shadows. The shadow chaser tries to jump into people's shadows. If successful, that player also becomes a shadow chaser. The winner is the last person having their shadow chased.

Be mindful about where you are in space and where you are casting a shadow.

Key Skills: decision making, physical movement, resilience

Materials: none required

Look up at the sky. If it is dry or you have something you can sit on you can lie down to get a better view. What shapes and colours can you see in the sky? Is the sky still or moving? Spot shapes in the clouds, do any of them look like familiar animals, plants, people or places? Think about the sky's consistent presence – it is there in night and day, in sunshine and rain, whether you are busy or sleeping. Now breathe deeply and try not to become distracted by outside noise or thoughts inside your mind. After spending a short time with the sky, notice how you feel. Is anything different? Is anything the same?

Key Skills: critical thinking, resilience

Materials: none required

How do you stay standing tall? What parts of your body help you stay upright? Can you make it more difficult to stand tall by reaching your arms above your head, standing on tip toes or closing your eyes?

Balance is something that architects think a lot about. Look at Keppel's Column carefully, how does it stay standing tall? What makes it stable and strong?

Try out some different balancing poses like the ones here – can you imagine a structure or building balancing that? How would it stay upright?

The trick to balancing for longer is to focus on your breath and keep your eyes on one spot. This helps you to stay present and mindful in the balance so you don't fall over!

Key Skills: critical thinking, making connections, problem solving, resilience

Materials: paper, materials for colour eg. chalks, paints, pencils, pens,

Close your eyes and focus on the sounds around you. What is the furthest sound away? What is the closest sound – maybe it is even inside you? Create a soundscape drawing, using different marks to represent different sounds. Think about the quality of the sounds you can hear – are they smooth or piercing, loud or quiet, high or low pitched. Then think about how you can use your line quality to represent these sounds accurately using lines that are jagged, delicate, broken, heavy or swirled. When you're finished, swap with someone else. Can you recognise sounds and interpret each other's soundscapes correctly?

Key Skills: communication, creative thinking, decision making, problem solving

Soundscapes

Materials: none required

Stand still, look around you and count how many different colours you can see. Now look at just one thing - maybe a leaf, the grass or a stone. How many different shades or hues of that one colour can you see in that object? Why do we describe a tree as only green when in just a leaf we can see so many different colours?

Key Skills: critical thinking, resilience

Materials: none required

The movement of air within a kiln is essential to the creation of ceramics and the movement of air inside our bodies as breath is equally as essential. Breathing keep us alive and yet it is a process we rarely take the time to notice. Let's take a moment to change that! Make yourself comfortable (stand, sit or lie), become still, close your eyes and focus on your breath. Notice where the breath physically moves your body. Notice the depth of the inhale and the length of the exhale. Now imagine you can see your breath as a colour – as it enters your body on an inhale through the lungs it is bright and bold. It circulates around your whole body and then is released back out. When you're ready, open your eyes. How do you feel?

Key Skills: creative thinking, critical thinking, resilience

Workshops

There are three video workshops available that link with this pack.

- **Working with Clay**

‘Working with Clay’ takes it’s inspiration from Waterloo Kiln, a former industrial clay kiln that was part of the famous Rockingham Works.

This workshop guides you through a number of clay processes including making impressions and reliefs and create basic ceramic vessels. Sarah-Jane provides practical options to suit multiple levels and age groups. The aim of the video is develop pupil’s confidence when working with clay and to increase their knowledge of the properties of clay.

- **Working with Transparency**

‘Working with Transparency’ is inspired by Catcliffe Glass Cone, a significant monument to the development of the glass industry in South Yorkshire.

In this workshop pupils will explore working with transparent materials and recreate the look of stained glass. The activities develop creative approaches to drawing and provide many cross curricular links including literacy, history, RE and science. The aim of the video is to cultivate a climate that provides opportunities for pupils to take creative risks whilst learning more about how we can use transparency as part of the creative process.

- **Working with Technology**

‘Working with Technology’ is inspired by Keppel’s Column and the incredible Wentworth Estate that surrounds it.

This video workshop uses basic animation techniques, digital co-creation, photography and photomanipulation to create digital artworks. The aim of the video is to enrich pupil’s understanding around the potential of technology in the arts and to cultivate practical skills that can be transferred to other curriculum areas.

If you would like further information about the cost of these workshops and how to use them in your educational setting, please contact the learning team via the contact page on our website.

http://www.rotherhamheritagelearning.org.uk/

Thanks

Text by: **Victoria Dawes, Christine Evans & Sarah-Jane Mason**

Activities created by: **Sarah-Jane Mason, Creative Practitioner & Educator**

Image Credits

Activity photographs: **Sarah-Jane Mason, Creative Practitioner & Educator**

Catcliffe Cone 70's Style Drawing: **Nadine Martin, Local Artist**

Catcliffe Cone model photograph, page 5: **Clifton Park Museum**

Historic Waterloo Kiln photograph, page 12: **Original image, Rotherham Archives and Local Studies – Waterloo Kiln, 04181**

Keppel's Column under repair, page 16: **Tony Dodsworth, Local Historian**

Site photographs page 4, page 5 images 1 & 3, page 7 images 1, 2 & 4, page 6 & page 8: **Luke Walsh, Photographer**

Site photographs page 5 images 2 & 5: **Pete De Veaux, Catcliffe Cone Community Group**

Site photograph page 7 image 3: **Gill Batson, Keppel's Column Community Group**

Site photographs page 9 images 1 & 4: **Fiona Shaw, Waterloo Kiln Community Group**

Site photographs page 9 images 2 & 3: **Alison Ilett, Waterloo Kiln Community Group**

Waterloo Kiln model photograph, page 9: **Clifton Park Museum**

Funded by Historic England

Rotherham Metropolitan Borough Council