

ATMOSPHERIC MEMORY

RAFAEL LOZANO-HEMMER

EDUCATION PROGRAMME

MIF Manchester
International
Festival
2019

SCIENCE+
INDUSTRY
MUSEUM

 Future
Everything

ARSENAL
contemporary art contemporain

CAROLINA
PERFORMING ARTS

ATMOSPHERIC MEMORY EDUCATION PROGRAMME

Manchester International Festival (MIF), Science and Industry Museum (SIM) and FutureEverything have teamed up to devise and present an engagement programme inspired by Atmospheric Memory. Created by artist Rafael Lozano-Hemmer and premiered at MIF19 this summer (6–21 July 2019), this breathtaking interactive art environment allows you to see, hear and even touch the sounds that travel through the atmosphere.

We're inviting school groups to experience Atmospheric Memory throughout its run at MIF19 via our free downloadable Explorative Kit for KS2, exploring the work's themes and ideas. This free resource can be used as a standalone education aid or to accompany a visit to Atmospheric Memory – and all tickets for school groups are free when booked in advance via the Science and Industry Museum website.

The Atmospheric Memory Education Programme is supported by The Granada Foundation.

More information can be found at atmosphericmemory.com

EXPLORATIVE KIT FOR KS2

CREATIVE ACTIVITIES

This resource pack contains five hands-on, cross-curricular classroom activities inspired by *Atmospheric Memory*.

Each activity lasts approximately 15 minutes by itself – but also includes extension ideas, helping you to create a full lesson plan around it. Alternatively, you can deliver multiple activities across a single lesson.

Each activity is presented as a loose script for teachers to follow in class, with further delivery instructions highlighted in capitals. All outlines include a list of resources that you'll need to gather, guidance on group sizes and clear links to the National Curriculum.

GROUP SIZE:

One class

LINKS TO ATMOSPHERIC MEMORY:

Visualising sound, senses and the air as a 'vast library'

LINKS TO THE NATIONAL CURRICULUM:

Art, Coding, Maths, English, PSHE

OVERVIEW:

For some people, sight and sound overlap. When they hear certain sounds, they sense different colours. This is called 'chromesthesia'. Some people can even match the sounds of individual letters to particular colours and make their own colour-coded alphabet.

In this activity, explore the words that hold meaning for you – then produce colour-coded your own works of art.

YOU WILL NEED:

Watercolour paints and water

Paint brushes

Paper

The colour-coded alphabet, downloadable with this guide (see next page)

FOLLOW THESE STEPS...

1. Think of a word that means a lot to you. Write it down.
2. Match the letters in your word to their colours in the colour-coded alphabet.
3. Paint your word as coloured shapes, lined up like letters.
4. Challenge a friend to use the colour-coded alphabet to crack the code and guess your word.

DID YOU KNOW...?

Charles Babbage created an invention called the Analytical Machine, often credited as the first mechanical computer.

WHAT NEXT?

Charles Babbage said the air is a vast library, holding every word ever spoken. Those words must overlap and jostle for space!

Choose more words that are important to you. Colour-code and add them to your first painting. Layer your words across the paper to make an explosion of colour and hidden meaning.

Team up with your friends and stage an exhibition to display your masterpieces.

a

black

b

tan

c

dark pink

d

purple

e

pale blue

f

mustard

g

green

h

navy blue

i

cream

j

grey

k

brown

l

yellow

m

orange

n

charcoal

o

red

p

vanilla

q

pink

r

lime green

s

blue

t

light pink

u

caramel

v

burgundy

w

turquoise

x

lavender

y

dark green

z

white

THE VOICE CHOICE

GROUP SIZE:

One class

LINKS TO ATMOSPHERIC MEMORY:

Recreating long-lost voices

LINKS TO THE NATIONAL CURRICULUM:

English, Drama, Creative Writing, History, PSHE

OVERVIEW:

Charles Babbage had an amazing thought: can we rewind the movement of the air to recreate long-lost voices? And if so, whose would we want to hear?

This activity challenges you to reflect on important conversations from your life before recreating them as mini-scripts.

YOU WILL NEED:

1. Pencil
2. Paper
3. Your memories

FOLLOW THESE STEPS...

1. Think of a conversation from your life that was important to you.
2. Answer the following three questions:
Who was involved in the conversation?
Why was it important?
How did everybody react?
3. Recreate the moment by writing it as a mini-script, including the words that people said and their actions.
4. Stage performances of your mini-play with friends playing the key roles.

DID YOU KNOW...?

To speak a sentence, 100 muscles in the neck, jaw, tongue, lips and even the chest must work together.

WHAT NEXT?

Link the activity to your classroom history studies.

Can you recreate important conversations from history?

POWERFUL WORDS

GROUP SIZE:

Up to six, sitting around a table and facing inwards

LINKS TO ATMOSPHERIC MEMORY:

The impact and importance of spoken words.

LINKS TO THE NATIONAL CURRICULUM:

English, Drama, Creative Writing, PSHE

OVERVIEW:

Charles Babbage said the air is a vast library holding every word ever spoken. He imagined making a machine that could reclaim these lost words. However, some words are never lost. We remember hearing or saying them forever.

This activity challenges you to reflect on a time when you used words that you regret and to replace them with positive words.

YOU WILL NEED:

One big ball of plasticine per person

FOLLOW THESE STEPS...

1. Think about a time when you used a word that you regret.
2. Form that word in plasticine.
3. In your group, one by one, show your word and explain how the word was said, but keep the names of people private. Discuss the impact you think the word had.
4. Finally, smush up your word. Form a replacement word that is positive and show it to your group.

DID YOU KNOW...?

Sean Shannon is the world's fastest talker. In 1995, he set a new world record, speaking 655 words in one minute. How many words can you say in one minute?

WHAT NEXT?

Explore the theme in Drama studies. How does a scene change when you replace a negative word with a positive word?

Think of a positive word to describe the people that you are close to.

When you see them next, tell them your word. What impact does it have on them?

BODY POP

GROUP SIZE:

Up to six

LINKS TO ATMOSPHERIC MEMORY:

Atmospheric pressure, visualising sound and intonation

LINKS TO THE NATIONAL CURRICULUM:

PE, Dance, Drama, English, Sound

OVERVIEW:

As words escape our lips, they push outwards in different directions, sizes and speeds to make shape bubbles in the air. But what shapes do different words make?

In this activity, use creativity and teamwork to act out the shapes that different words might form.

YOU WILL NEED:

Per table: an envelope containing one of the following words: shuttlecock, nincompoop, hullabaloo, wibbly-wobbly, flabbergasted, gobbledygook; each table must have a different word

FOLLOW THESE STEPS...

1. Open your envelope to reveal your word. Don't let another table see it!
2. Discuss the word in your group. Think about the number of syllables it has and the way your mouth moves to pronounce the different sounds.
3. For each part of the word, think of a short body movement. Then do all of the movements in sequence to create a mini dance routine representing your word.
4. Teachers: bring all the words up on your white board. Challenge the class to perform their routines and guess which word they connect to.

DID YOU KNOW...?

Air pressure is lower at higher altitudes. This makes it harder for animals to breathe – and also lowers the boiling points of liquids.

WHAT NEXT?

As words escape our lips, they push outwards in different

Repeat the activity with a new set of words. Try these: shenanigans, wishy-washy, codswallop, hornswoggle, tomfoolery, spelunker. Can you come up with your own set of fun-sounding words?

Reverse the activity. Can your students create a movement sequence and then get other groups to think of a matching word or sentence?

WAX WORDS

GROUP SIZE:

One class

LINKS TO ATMOSPHERIC MEMORY:

The personal impact and importance of words

LINKS TO THE NATIONAL CURRICULUM:

English, Art, PSHE, Science (material properties).

OVERVIEW:

Words escape our lips into the air. We hear them as fleeting sounds and then they're gone – but they never disappear. We remember them, connecting them to memories, images or feelings. In moments of sadness, the words we've heard can make us smile.

In this activity, you'll reflect on the impact that words have on you before creating hidden messages, revealed through paint

YOU WILL NEED:

Wax candle

Watercolour paper, paints and water

Paint brush

FOLLOW THESE STEPS...

1. Think of a word that makes you feel happy. Explain your choice to your friends.
2. On a sheet of watercolour paper, write your word or draw an image that links to it.
3. What colour do you associate with feeling happy? Maybe it's more than one colour. Paint over your word with the colour of your choice and watch as it's revealed!
4. Repeat the activity but link your art to different emotions, such as sadness, anger, surprise, excitement or fear.

DID YOU KNOW...?

Superhydrophobic coatings repel water, just like wax. We use them on everything from frying pans to mobile telephone screens.

WHAT NEXT?

Take the activity to the next level and make superhydrophobic art in your playground.

Using Rainworks Invisible Spray and your own stencil designs, create hidden art that will be revealed the next time it rains.

MORE ABOUT ATMOSPHERIC MEMORY

ATMOSPHERIC MEMORY

Rafael Lozano-Hemmer

Experience a breathtaking interactive art environment where you can see, hear and even touch the sounds that travel through the atmosphere.

Rafael Lozano-Hemmer's Atmospheric Memory scours the sky for the voices of our past. Inspired by computing pioneer Charles Babbage's 180-year-old proposal that the air is a 'vast library' holding every word ever spoken, Atmospheric Memory asks: was Babbage right? Can we rewind the air to recreate long-lost voices? And if so, whose would we want to hear?

An array of 'Atmospheric Machines' mine the air for turbulence caused by speech, then transform it into trails of vapour, ripples on water, epic 360-degree projections. These artworks are presented alongside the Science Museum Group's rare section of Babbage's Analytical Engine, a key object in the prehistory of computing.

Staged in a custom-built chamber, Atmospheric Memory explores the beautiful tumult of the air we breathe – and ultimately celebrates the transience of the sounds that fleetingly live within it.

Commissioned by Manchester International Festival, Science and Industry Museum, FutureEverything, ELEKTRA/Arsenal Contemporary Art Montreal and Carolina Performing Arts – University of North Carolina at Chapel Hill. Produced by Manchester International Festival and curated with FutureEverything and Science and Industry Museum.

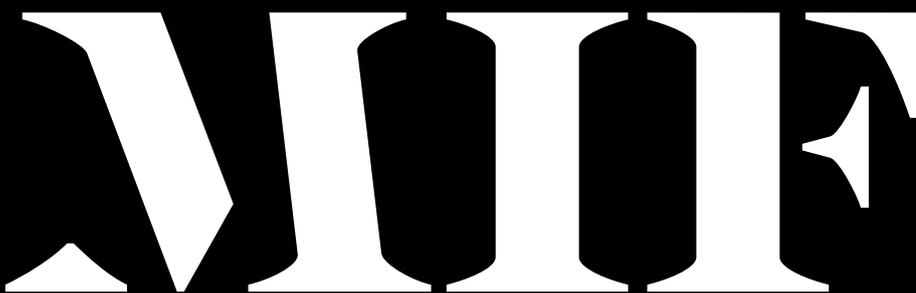
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More information about Atmospheric Memory can be found at mif.co.uk/memory and atmosphericmemory.com

6- 21 July

For more information about Science and Industry Museum go to scienceandindustrymuseum.org.uk



Manchester
International
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4-21 July
mif.co.uk

bruntwood

