19TH OF SYDNEY 21MARCH -9 JUNE 2014 **19BOS.COM**

PRIMARY SCHOOL EDUCATION KIT

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With thanks

Debbie Bourke













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HOW TO USE THIS RESOURCE

The Primary Education Kit has been designed to support educators in creating engaging learning opportunities connected to the 19th Biennale of Sydney: You Imagine What You Desire.

This resource provides detailed content on some of the artists in the exhibition, a glossary of key terms and suggested questions and activities.

The Kit is designed to be flexible, and is ready to use as a projection or in conjunction with a SMART Board. The resource may be printed as an educator resource or as a student handout.

The integrated learning topics section of the Primary Education Kit forms a part of the resource's presentation style format. There are seven topics, with 1–3 artists featured per topic. Each artist profile has one full-page image of their artwork as well as a page with KLA specific information.

The Question and Activity sheets correspond to the seven topics outlined in the presentation component of the resource. These can be used by the teacher to design and develop classroom activities and can also be printed as a student handout. The cross-disciplinary style of the questions will allow students to learn about History, English, Science and Maths, consolidated with practical visual arts activities. When you start your questions and activities, you might like to leave the image of the artwork up on the SMART Board inspiration.

Before engaging with the syllabus questions we encourage you to connect your students with the artwork in question.

5 STEPS TO ENGAGE STUDENTS WITH A WORK OF ART:

- What is my first impression of the artwork?
- How does the artwork make me feel?
- What does it remind me of?
- What is it made of?
- How is it made?

19TH BIENNALE OF SYDNEY: YOU IMAGINE WHAT YOU DESIRE

WHAT IS AN ART EXHIBITION?

An art exhibition can be held anywhere and at any time but are usually staged by a specific museum or gallery. An exhibition can represent either one artist, or multiple artists covering a theme. The artist(s) may be living or have been deceased for centuries. Exhibitions can consist of artworks hung on walls, sculptures, installation art, sound art or screenings of video.

WHAT IS A BIENNALE?

'Biennale' is an Italian word that means an event that occurs every two years. It has come to mean a festival, held once every two years, that showcases contemporary visual art. A biennale is usually held in a city or town for approximately one to three months.

The first biennale was held in Venice La Biennale di Venezia in 1895. The second biennale in the world was the São Paulo Biennial founded in 1951. The Biennale of Sydney, first presented at the Sydney Opera House on the occasion of its opening in 1973, is the third.

There are now around 100 biennales occurring around the world in places such as Berlin, Taipei, Istanbul, São Paulo, Sharjah (United Arab Emirates) and Shanghai.

ABOUT THE BIENNALE OF SYDNEY

The Biennale of Sydney is one of the oldest and most significant biennales in the world. In 2014, the Biennale of Sydney presents its 19th edition. A different Artistic Director is chosen for each Biennale. They are selected by a committee about two years before their Biennale opens, and they usually spend around a year travelling internationally and around Australia, meeting artists and doing research for their exhibition. Each Biennale has a different theme, which is explored through the bringing together of lots of different works.

ABOUT THE ARTISTIC DIRECTOR

The Artistic Director for the 19th Biennale of Sydney is Juliana Engberg. Like most of the Biennale's Artistic Directors she is a curator, someone who puts together art exhibitions with different artists. However, Engberg is also an academic, a writer and an editor. She has produced over 1500 articles, essays and catalogues for local and international art journals, newspapers, catalogues, as well as contributing to conferences and forums, radio and television programs.

Engberg also holds the position of Artistic Director at the Australian Centre for Contemporary Art (ACCA).

Juliana Engberg's exhibition **concept** is **You Imagine What You Desire**. It is an exhibition that engages
with ideas about desire, architecture, utopia, science,
the environment, beauty and, most importantly,
imagination.

CONCEPT: A general idea; a scheme or plan.

INTEGRATED LEARNING TOPICS

VISUAL ARTS: FOCUS ON COLOUR

Jim Lambie: VAS2.1, VAS2.3, VAS3.4 Pipilotti Rist: VAS2.1, VAS2.3, VAS3.4

SCIENCE: LIVING WORLD

Broersen & Lukàcs: ACSSU094, ST2-11W Sol Archer: VAS3.1, VAS 3.4, EN2-4A, EN2-8B, HT2-5, ST2-2VA, ST2-10LW, ST2-11LW, ST3-15I Yhonnie Scarce: ST3-11LW. ST3-10LW

HSIE: HISTORY

Michael Cook: HT3-1, VA3.2, DRAS3.3 Hubert Czerepok: HT2-2, HT3-3, HT3-4

VISUAL ARTS AND MUSIC: COLLAGE

John Stezaker: VAS2,3, VAS2.4, VAS3.2, VAS3.4 Christine Streuli: VAS2.1, VAS 2.2, VAS3.1 Nathan Gray: MUS3.1, MUS3.2

SCIENCE: PHYSICAL WORLD

Ross Manning: ACSSU097, ACSSU080, ACSSU097, ST3-6PW Gerda Steiner & Jörg Lenzlinger: ST3-11LW, ST3-10LW, ST2-4WSST3-6PW

MATHS: GEOMETRY

Martin Boyce: MA2-14MG, MA3-14MG, MA2-15MG, MA3-15MG

SCIENCE: BUILT ENVIRONMENT

Joseph Griffiths: ST3-14BE, ST3-5WT Randi & Katrine: ST2-14BE, ST3-14BE

ENGLISH

Meriç Algün Ringborg: EN3-2A, EN3-5B, VAS2.1, VAS3.1 Nathan Coley: EN3-7C, VAS2.4, VAS3.4 Ann Lislegaard: EN2-9B, EN3-6B, EN3-2A, EN3-1A

VISUAL ARTS: FOCUS ON COLOUR

Step into the technicolour worlds of Jim Lambie and Pipilotti Rist as they explore colour in relation to how it makes us feel and think.



Jim Lambie, Zobop, 2003 (installation view detail), vinyl tape, dimensions variable. Installation view of 'Days Like These: Tate Triennial' (2003) at Tate Britian, London. Courtesy the artist and The Modern Institute/Toby Webster Ltd. Glasgow. Photographer: Mark Heathcote Artwork in full on page 8



Pipilotti Rist, *Mercy Garden Retour Skin*, 2014 (video still, detail), six-channel HD video installation, sound, carpet, pillows. Courtesy the artist; Hauser & Wirth; and Luhring Augustine. Music: Heinz Rohrer



JIM LAMBIE

Born 1964 in Glasgow, Scotland Lives and works in Glasgow

Jim Lambie's artworks excite and delight the senses. The artist uses colourful tape to mark the edges of a room in the gallery. This process is continued until the entire floor is covered in a carpet of brightly coloured lines and patterns – similar to an optical illusion or **kaleidoscope**.

As he is also a musician and DJ, many of Lambie's artworks celebrate the rhythms and sounds of music. For example, records were made using a plastic called vinyl and the tape Lambie uses in his artworks is made from the same material. The artist is not only inspired by the materials of music, but also by the way it makes us feel – dancing the night away at the school disco, or playing the air guitar to our favourite rock band in our bedrooms. The artwork makes us feel energetic and alive.

KALEIDOSCOPE: A tube-shaped object that is rotated to produce colourful designs and patterns. Small mirrors and pieces of glass inside the tube reflect off one another to produce these colours and patterns.



Cover: Jim Lambie, *Zobop*, 1999 (installation view), vinyl tape, dimensions variable. Installation view of 'Zobop' (1999) at The Showroom, London Courtesy the artist and The Modern Institute/Toby Webster Ltd. Glasgow

Above: Jim Lambie, *Zobop*, 2003 (installation view), vinyl tape, dimensions variable. Installation view of 'Days Like These: Tate Triennial' (2003) at Tate Britian, London. Courtesy the artist and The Modern Institute/Toby Webster Ltd. Glasgow. Photographer: Mark Heathcote

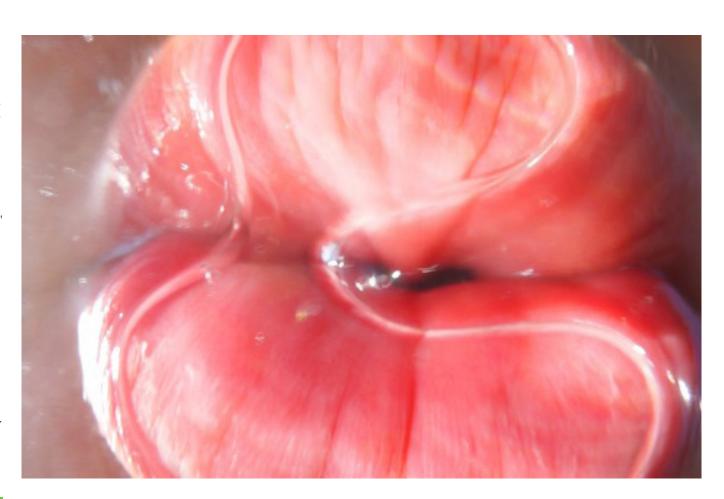


PIPILOTTI RIST

Born 1963 in Grabs, Switzerland Lives and works in Zurich, Switzerland

Though her real name is Elisabeth Charlotte, the artist decided she suited the name Pipilotti instead (named after the character of Pippi Longstocking) because they share the same playful, brave and independent personality. Her artworks are no different – the artist creates brightly coloured video wonderlands that explore ideas of fantasy and imagination.

Rist uses film and television techniques to create large cinematic videos that are projected onto unusual surfaces, such as the inside of a bottle, the walls of a bathroom, and the ceiling of a church. For her Biennale work, the artist has challenged the way that we would normally view film by creating an installation that invites the audience sit on beanbags, couches and carpets as they watch the colourful world unfold on the gallery's walls. The **subject matter** of the film pulls together images we see every day – different places, objects, colours and people – in a way that sparks our imagination. The audience is encouraged to make new connections as they journey through the world that Rist has created.



SUBJECT MATTER: The substance of a discussion, book, writing etc. as distinguished from its form or style.

Cover: Pipilotti Rist, *Mercy Garden Retour Skin*, 2014 (video still), six-channel HD video installation, sound, carpet, pillows. Courtesy the artist; Hauser & Wirth; and Luhring Augustine. Music: Heinz Rohrer

Above: Pipilotti Rist, *Mercy Garden Retour Skin*, 2014 (video still), six-channel HD video installation, sound, carpet, pillows. Courtesy the artist; Hauser & Wirth; and Luhring Augustine. Music: Heinz Rohrer

QUESTIONS

JIM LAMBIE (VAS2.1, VAS2.3, VAS3.4)

Research artists who use geometric patterns in their work such as Bridget Riley, Frank Stella, Gemma Smith and Jim Lambie. Using grid paper and coloured textas, experiment with different geometric images. You may be inspired by these artists to create your own abstract artwork. Think about the different types of shapes you will create, their colours and patterns – how will your shapes fit together and overlap?

2 Select a smaller area of your original drawing that is particularly interesting or exciting. Enlarge this area to create a new painting and/or collage that uses different coloured and patterned paper such as cellophane, bright paper or pages from newspapers and magazines.

PIPILOTTI RIST (VAS2.1, VAS2.3, VAS3.4)

1 Choose two colours. Are they primary or secondary? Complementary? Warm or cool? Create a collage for each colour you have choser Use images from magazines, such as places, people and objects that reflect those colours. What emotions do these colours evoke? Display your collages as a class.

2 Brainstorm a list of similarities and differences between Jim Lambie and Pipilotti Rist.

A What type of artworks do they make?

B What are their works about?

🕻 How do these artists use colour?

Now do visitors interact with their artworks

E How does each artwork make you feel

LEARN MORE ABOUT COLOUR THEORY OR PRINT A COLOUR WHEEL FOR YOURSELF HERE

VISUAL ARTS AND MUSIC: COLLAGE

Mixing and matching to create new meaning, collage is a powerful tool for artists and musicians alike. Check out Nathan Gray's sculptural assemblage below, he also collages music and sound to create soundscapes.



John Stezaker, Mask CXLIX, 2010, collage, 24.5 x 19.4 cm (unframed). Courtesy the artist and The Approach, London

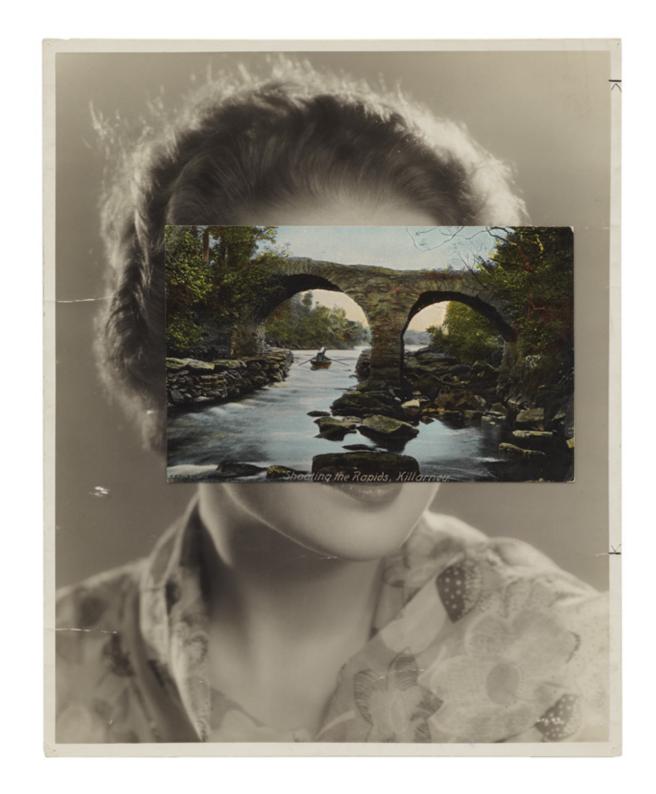




Top: Christine Streuli, *Colour-Distance*, 2007, mixed media on cotton, paper and wall. Installation view of the Swiss Pavilion at the 52nd Venice Biennale (2007). Courtesy the artist. Photograph: David Aebi

Bottom: Nathan Gray, *The New National Anthem II*, 2012, trumpet and copper pipe, $62 \times 27 \times 35$ cm. Courtesy the artist and Utopian Slumps, Melbourne. Photograph: Nathan Gray

JOHN STEZAKER



JOHN STEZAKER

Born 1949 in Worcester, England Lives and works in London, England

As a way of remembering the past, British artist John Stezaker collects **vintage** photographs, film stills and postcards. Fascinated by their **nostalgia**, the artist carefully cuts and layers these found images to create new artworks that change and replace the meaning and memory of the old ones.

With an eye for **composition**, angle, tone and shape, Stezaker uses the technique of collage, seamlessly layering different images on and around each other. The resulting artworks are fascinating and haunting at the same time. The artist's work is inspired by famous artists such as Gerhard Richter and Sigmar Polke, and is often compared to artworks of the **surrealist** movement.

VINTAGE: Old-fashioned or obsolete.

NOSTALGIA: A wistful desire to return to a former time in one's life, to one's home or homeland, or to one's family and friends; a sentimental yearning for the happiness of a former place or time.

COMPOSITION: The placement or arrangement of elements (both visual and musical) in a work of art.

SURREALISM: A style of art and literature developed principally in the 20th century, stressing the subconscious or dreamlike significance of imagery.



Above: John Stezaker, *Muse (Film Portrait Collage) XII*, 2013, collage, 31 x 29.7 cm (unframed). Courtesy the artist and The Approach, London



CHRISTINE STREULI

Born 1972 in Bern, Switzerland Lives and works in Berlin, Germany

Swiss artist Christine Streuli loves bright colours, combining them in her artworks with as many crazy patterns and shapes as she can. Every single tapestry, wallpaper, tattoo, magazine image and artwork she has ever seen in her whole life seems to have been collected and displayed as one energetic and wild explosion of ideas.

Experimenting with handmade, traditional and new techniques and materials, Streuli's artworks are full of endless possibilities. A variety of images make up her mural-like installations of collage, painting, drawing and printmaking. Streuli has created a new work especially for Cockatoo Island. Working with large pieces of paper laid out on the floor, the artist has stamped, sprayed and imprinted large patterns on them. The artwork is overflowing with so many different materials, images and ideas that they spill off the paper. Streuli's artworks encourage us to be inspired by the wonder, colour and energy of our own imagination.

MURAL: A large picture painted or affixed directly on a wall or ceiling



Cover: Christine Streuli, *Colour-Distance*, 2007, mixed media on cotton, paper and wall. Installation view of the Swiss Pavilion at the 52nd Venice Biennale (2007). Courtesy the artist. Photograph: David Aebi

Above: Christine Streuli, *Go North, Go South, Go East, Go West*, 2004, mixed media on cotton, 286 x 371 cm. Courtesy the artist. Photograph: David Aebi

NATHAN GRAY



NATHAN GRAY

Born 1974 in Perth, Australia Lives and works in Melbourne, Australia

Collage techniques can be used beyond the visual arts. Think about the way DJs mix music together. Experimental musician Nathan Gray makes artworks based on **improvisation**, using a range of materials to create artworks inspired by music, nature, geology and physics. The artist connects these ideas and materials by recording, overlapping and changing sounds, images and objects to create harmony in his **multi-sensory** installations.

When we make creative and theatrical works of art, we often use a process of trial and error. We might create images as we go, figuring out whether we like them or not. The final artworks come together as a result of chance and learning.

Gray has produced a collection of audio-visual works for the Biennale. The artworks were made using materials sourced directly from Cockatoo Island. We call artworks like this 'site-specific' becaus they directly connect or respond to the unique ideas, materials and sounds of a particular space.



IMPROVISE: To compose and perform or deliver without previous preparation.

MULTI-SENSORY: Relating to many senses at once such as touch smell, sight etc.

Cover: Nathan Gray, *Treatise (Pages 77 and 131)*, 2012, wood, stainless steel, aluminum and rope, $450 \times 300 \times 150$ cm. Installation view at the Tarrawarra Biennial (2013). Courtesy the artist and Tarrawarra Museum of Art

Left: Nathan Gray, *Species of Spaces*, 2013–14 (production still) multi-channel video installation. Courtesy the artist and Utopian Slumps, Melbourne

QUESTIONS

JOHN STEZAKER (VAS2,3, VAS2.4, VAS3.2, VAS3.4)

Salvador Dali, René Magritte and Giorgio de Chirico were Surrealist artists. Research this art movement and the work of these artists. Use photographs and other images to create a collage that appropriate one of your family photos in the dreamlike, imaginative style of the Surrealists.

CHRISTINE STREULI (VAS 2.1, VAS 2.2, VAS 3.1)

Looking at elements of artworks – line, colour, tone, shape, form, texture and space – create a collage using images from magazines that includes at least four of these elements in an interesting way.

2 Research the murals of Diego Rivera and Pablo Picasso. Create a class mural in the style of Christine Streuli that retells a historic event.

NATHAN GRAY (MUS3.1, MUS3.2)

In groups of three, create a soundscape of that reflects your school environment using objects and materials found in your classroom to create different sounds. Perform this in front of your peers, and record each group's composition to create a classroom soundtrack.

ENGLISH

Whether we are reading our favourite book, or telling tales of holiday adventures to friends, stories hold such a special place in our hearts and minds. Explore the power of storytelling with artists Meriç Algün Ringborg, Nathan Coley and Ann Lislegaard.



Ann Lislegaard, *Time Machine*, 2011 (detail) mirror box, 3D animation with sound, 5:26 mins. Installation view (2011) at Murray Guy Gallery, New York. Courtesy the artist; Galerie Paul Andriesse, Amsterdam; and Murray Guy Gallery, New York/ Photograph: Fabiana Viso Artwork shown in full on page 25





Top: Meriç Algün Ringborg, *The Library of Unborrowed Books, Section I: Stockholm Public Library*, 2012 (detail), books, shelves, brass sign, contracts, dimensions variable. Courtesy the artist; Galeri NON, Istanbul; and Galerie Nordenhake, Stockholm. Photograph: Jean Baptiste-Béranger. Artwork appears in full on page 21

Bottom: Nathan Coley, A Place Beyond Belief, 2012 (detail), illuminated text on scaffolding, $6\times6\times2.5$ m. Installation view at the National Gallery of Kosovo, Pristina. Courtesy the artist. Photograph: Atdhe Mulla. Artwork appears in full on page 23

MERIÇ ALGÜN RINGBORG



MERIÇ ALGÜN RINGBORG

Born 1983 in Istanbul, Turkey Lives and works in Stockholm, Sweden

Do you like to read?

What is your favourite book?

And what about the books that no-one reads – where do they go?

Meriç Algün Ringborg is an artist who has created a library of all of the books that people have **never** borrowed from their local libraries. If books aren't borrowed over a long period of time, they are usually collected and sold or thrown away. It is sad to think of writers and editors spending hours researching and compiling novels, biographies and **compendiums** of information – for no-one to ever read them!

The artwork also makes us think about the knowledge and ideas within these unread books. If these books were to disappear, will the knowledge they contain also disappear from the world? As much of our learning has transferred to digital systems and the internet, the artwork poses questions to the viewer about what is lost in this process.

COMPENDIUM: A full list or inventory



Cover: Meriç Algün Ringborg, *The Library of Unborrowed Books, Section I: Stockholm Public Library*, 2012 (detail), books, shelves, brass sign, contracts dimensions variable. Courtesy the artist; Galeri NON, Istanbul; and Galerie Nordenhake, Stockholm. Photograph: Jean Baptiste-Béranger

Above: Meriç Algün Ringborg, *The Library of Unborrowed Books, Section I: Stockholm Public Library*, 2012 (detail), books, shelves, brass sign, contracts, dimensions variable. Courtesy the artist; Galeri NON, Istanbul; and Galerie Nordenhake, Stockholm. Photograph: Jean Baptiste-Béranger



NATHAN COLEY

Born 1967 in Glasgow, Scotland Lives and works in Glasgow

Nathan Coley is a Scottish artist who is interested in the way that different places and environments can affect our thoughts, feelings and the way we live our lives. We often think about the impacts that our built environment might have on us. Coley's work explores the **associations** and ideas we often connect to different buildings or spaces.

Coley is best known for his text-based neon works that draw attention to the spaces in which they are exhibited. The phrases and words are usually quite poetic and sometimes difficult to understand, but with these little snippets the artist hopes to inspire our imagination and help us to make connections between the text and the <code>imagery</code> that we can see around it.

ASSOCIATIONS: The connection or relation of ideas feelings, sensations.

MAGERY: The formation of mental images, figures or likenesses of things.



Cover: Nathan Coley, A Place Beyond Belief, 2012, illuminated text on scaffolding, $6 \times 6 \times 2.5$ m. Installation view at the National Gallery of Kosovo, Pristina. Courtesy the artist. Photograph: Atdhe Mulla

Above: Nathan Coley, *We Must Cultivate Our Garden*, 2006, illuminated text on scaffolding, 10 x 70 m. Installation view at Pennsylvania Hotel, Vancouver (2012–13). Courtesy the artist. Photograph: Scott Massey



ANN LISLEGAARD

Born 1962 in Tønsberg, Norway Lives and works in Copenhagen, Denmark and New York, USA

Ann Lislegaard is an artist who is interested in the **genre** of science fiction. She is fascinated by the relationship between animals and people, and people and machines. Her two video works feature **three-dimensional** animated animals that are given personalities and the ability to talk.

In *Time Machine* (2011) a battered and tired fox tries to explain his experiences of time travel to the viewer. He stutters, repeats himself and gets lost in his own narrative. Perhaps the effect of travelling through time has damaged his ability to tell a story with a proper beginning, middle and end. The artwork shows us sometimes that language is a difficult beast to master, and that time and order are often quite important to explaining something clearly.

In *Oracle* (2012) twin owls deliver a prediction of the future, starting with the phrase, 'The Oracle says there are secrets beneath things within us and in the almost human.' The owl is a symbol of wisdom and knowledge, dating back to ancient Greece. With this symbol in mind, we expect to hear a visionary speech, but the language of the twin owls is confusing and difficult to understand. Perhaps the future is not so easy to predict after all.



GENRE: A category of literature or other forms of art and entertainment, for example, music.

THREE-DIMENSIONAL: Having, or seeming to have, the dimension of depth as well as width and height.

Cover: Ann Lislegaard, *Time Machine*, 2011, mirror box, 3D animation with sound, 5:26 mins. Installation view (2011) at Murray Guy Gallery, New York. Courtesy the artist; Galerie Paul Andriesse, Amsterdam; and Murray Guy Gallery, New York. Photograph: Fabiana Viso

Left: Ann Lislegaard, *Oracles, Owls...Some Animals Never Sleep,* 2012–13 (video still), two-channel 3D animation with voice and manipulated film track, 12:48 mins. Courtesy the artist; Galerie Paul Andriesse, Amsterdam; and Murray Guy Gallery, New York

QUESTIONS

MERIÇ ALGÜN RINGBORG (EN3-2A, EN3-5B, VAS2.1, VAS3.1)

The loss of knowledge and stories is a very sad thing. Imagine that your favourite book or movie was going to be removed from all libraries. No one would get to experience that great text! Write a letter to the head of the library manager explaining what that book or DVD means to you and why it is important for other people. Use persuasive language to argue your case.

2 Through drawing, painting or collage, re-create the cover image of your favourite book or movie. How will you entice people to read or watch these stories? How does your cover differ from the original?

NATHAN COLEY (EN3-7C, VAS2.4, VAS3.4)

Asthan Coley uses short pieces of text that are very provocative. He makes us think of lots of things even with only a few words. The texts in his work are almost like very short poems, or even a directive (telling people what to do). His works also make us more conscious of the environment they are located in.

Another form of short text is a haiku. Write a Haiku about somewhere in your school environment – it might be the playground, the classroom or somewhere like the art room. You should relate the subject matter of your haiku to the environment you have chosen.

2 Using armature wire, string or cardboard, create a sculpture of your haiku and install this into your school environment. Take photos of the artwork here. How do other students respond to the artwork? How does this change the way students feel about the space?

ANN LISLEGAARD (EN2-9B, EN3-6B, EN3-2A, EN3-1A)

In Lislegaard's works, the stuttering animals have trouble explaining themselves. They forget to tell stories in a straight-forward way that have a beginning, middle and end.

Pretend that you are either the oracle owls or the time travelling fox. Write a short one page speech from the perspective of these animals in a straight-forward and chronological manner. Then, print your writing and cut it up into sections. Mix and match them to create a confused story. Read your stories out to the class.

You can re-tell either

A What is the fate of mankind; or,

B What happened to you when you travelled back in time. Be as imaginative as you like!

HSIE: HISTORY

Beautiful black and white photographs and peaceful protests await in this section. Learn about social justice and cultural history with Polish artist Hubert Czerepok and Australian artist Michael Cook.



Hubert Czerepok, *Let's Change It All*, 2011 (video still), HD video documentation of performance, 120 mins. Courtesy the artist and ŻAK I BRANICKA, Berlin. Photograph: Robert Mleczko Artwork appears in full on page 31



Michael Cook, *Majority Rule, Tunnel*, 2014, inkjet print on archival Hahnemuhle photo rag paper, 140 x 200 cm (unframed) Courtesy the artist and Andrew Baker Art Dealer, Brisbane



MICHAEL COOK

Bidjara people Born 1968 in Brisbane, Australia Lives and works in Kawana, Sunshine Coast, Australia

'When I produce art I feel a stronger connection with my **ancestry** and this helps me to understand Australian history – in particular, my history. Each new project introduces me to different people and communities, and new life experiences.'

Michael Cook, 19th Biennale of Sydney Project Proposal



Who is the man in these photographs? What is his profession? Why does he appear many times?

With less than four percent of the Australian population identifying as Aboriginal or Torres Strait Islander, Cook asks **hypothetical** questions about cultural groups that make up the minority within a society and what it means to be the powerful majority.

For the 19th Biennale of Sydney, the artist has created a new series of photographs entitled *Majority Rule* (2014). In these images, the same Aboriginal man has been photographed numerous times in busy city streets, and at significant sites around Brisbane, including the War Memorial. By layering multiple images over one another, the artist builds up a society of Aboriginal men who appear to have become the majority. The artist hopes that these photographs will encourage audiences to think about a future Australia, one that has been re-**colonised** by its' Indigenous minority.

Michael Cook belongs to southeast Queensland's Bidjara people. Growing up, Cook witnessed the fight for Indigenous rights and learnt to question what was right, wrong and fair in Australian society. He holds strong ties to his Aboriginal heritage and learns more about it each time he makes a work. The artist remains passionate about Indigenous rights and creates artworks about ancestry, Australian history and personal stories.

ANCESTRY: Family history, from where one's family has come from.

HYPOTHETICAL: Something that is uncertain or only exists as an idea or concept.

COLONISATION: The intentional occupation of land by a foreign country. A process where a nation forces their own, different system of government over another group of people. It involves the colonial power asserting and enforcing its sovereignty according to its own law, rather than by the laws of the colonised.

Cover: Michael Cook, *Majority Rule, Memorial*, 2014, inkjet print on archival Hahnemuhle photo rag paper, 140 x 200 cm (unframed). Courtesy the artist and Andrew Baker Art Dealer, Brisbane

Left: Michael Cook, *Majority Rule, Bridge*, 2014, inkjet print on archival Hahnemühle Photo Rag paper, 140 x 200 cm (unframed). Courtesy the artist and Andrew Baker Art Dealer, Brisbane



HUBERT CZEREPOK

Born 1973 in Słubice, Poland Lives and works in Wrocław, Poland

'Longer weekends!', 'More Lego!', 'No more Barbie!'

Hubert Czerepok, 19th Biennale of Sydney Project Proposal

Let's Change It All (2011, 2014) isn't your everyday protest – here the protesters are children and their message is very different. Inspired by news headlines in the media, Polish artist Hubert Czerepok creates performance artworks that allow children to voice their ideas and opinions about the world. Czerepok encourages children to march in peaceful protest in support of freedom, silliness and imagination.

Through workshops held with the artist, school students created their own protest signs – text artworks to inspire and motivate whoever reads them.

What are some positive things that you would wish for to improve your life as well as the lives of others? Be creative – nothing is off limits!



PROTEST: Where someone or a group of people express objection or disapproval, often in opposition to something a person is powerless to prevent or avoid.

PERFORMANCE ART: A work of art that usually uses people as performers. It can be any situation that involves time, space, the performer's body, and a relationship between performer and audience. Performance art can happen anywhere, in any venue or setting and for any length of time. The actions of an individual or a group at a particular place and in a particular time make up the work.

Cover and left: Hubert Czerepok, *Let's Change It All*, 2011 (video still), HD video documentation of performance, 120 mins. Courtesy the artist and ŻAK I BRANICKA, Berlin. Photograph: Robert Mleczko

QUESTIONS

MICHAEL COOK (HT3-1, VA3.2, DRAS3.3)

- What significant historical events are Michael Cook's works inspired by?
- 2 In small groups, research the history of first contact between Aboriginals and First Settlers. What was life like for both groups before and after the Settlers arrived and colonised Australia?
- In your group, create a story board depicting key scenes from before and after first contact. You might like to include a scenes from before European settlers left their homeland, what life was like for Aboriginal people prior to European settlement, and what life was like for both groups after settlement. Create an animation, live or pre-recorded performance of your story to be shown to the class.
- 4 Using your storyboard as inspiration, write a short story from the perspective of one individual and their experience of early Australia.

HUBERT CZEREPOK (HT2-2, HT3-3, HT3-4)

- In his work, Czerepok re-stages a protest but with very different participants to those who normally make up a protest. Discuss in groups the types of people who protest. Why do they protest? Is it one person or a group? Share your answers with the class.
- 2 As a class, discuss what you think might be the advantages and disadvantages of protesting? And does a protest achieve its intended purpose?
- 3 Sometimes in order for protests to be more effective a group of people must have a leader, someone to inspire and motivate them. Research one of the following significant individuals and their role in shaping their community: Eddie Mabo, Rose Scott, or another historical figure of your choice.

MATHS: GEOMETRY

Who said 'maths' and 'art' couldn't be used in the same sentence? Delve into the sculptures of Martin Boyce to discover the beauty that lies in geometry.

Martin Boyce, *Against the Night*, 2013 (detail), perforated steel, steel chain, plywood, wood stain, wood oil, galvanized steel, wired electrical lights dimensions variable. Courtesy the artist and the Modern Institute/Toby Webster Ltd., Glasgow. Photograph: Jean Vong. Artwork appears in full on page 34





MARTIN BOYCE

Born 1967 in Glasgow, Scotland Lives and works in Glasgow

Playgrounds, schools, car parks ... In a strange way the sculptures of Martin Boyce share a similar look and feel to these places. But not quite! The shapes are a bit bent, the angles are not quite right. Although the artist's work resembles everyday objects and spaces, he reminds us that sometimes these designs fail their purpose.

Like inventors, artists think about how an artwork will be made for, and used within, a particular space. The artist's installation in the MCA has a sense of **spaciousness** about it. You can approach it, walk around it – it's not two-dimensional like a painting. You can physically experience this work by being in and among it.

The artist creates his **installations** using different shapes and materials that are assembled to create three-dimensional sculptures. His practice spans photography, print and sculptural installation, and you can recognise a similar geometry across all his works.

SPACIOUSNESS: Containing a lot of space, broad in scope.

INSTALLATION: Something installed into a space.



Cover: Martin Boyce, *night terrace – lantern chains – forgotten seas – sky*, 2011, mixed-media installation. Installation view (2011) at The Modern Institute, Glasgow. Courtesy the artist and The Modern Institute/Toby Webster Ltd, Glasgow. Photograph: Keith Hunter

Above: Martin Boyce, *Against the Night*, 2013, perforated steel, steel chain, plywood, wood stain, wood oil, galvanized steel, wired electrical lights dimensions variable. Courtesy the artist and the Modern Institute/Toby Webster Ltd., Glasgow. Photograph: Jean Vong

MARTIN BOYCE (MA2-14MG, MA3-15MG, MA3-15MG)

Create two sketches of Martin Boyce's work.

A In one sketch, try drawing a part of his work in 3D. Consider the angles and vanishing points created by the different sculptural elements.

B In another sketch, break down the artwork into individual shapes and objects. This drawing will look more like a plan for the work. Sketch out and label each of the different elements noting whether they are 2D or 3D. Label any recognisable prisms or polygons.

2 In groups of two, brainstorm a simple object in the built environment – it could be a swing set or a park bench, a bus shelter or picnic table. Draw this object only using the following basic shapes squares, rectangles, hexagons, triangles, ovals and trapeziums. Be creative with how you join these together!

What is the result? Does your work look a little bit like Martin Boyce's sculpture? By changing the visual appearance of your chosen object to shapes you have abstracted the image. What objects do you think Boyce has abstracted to create his sculptures? What do they remind you of?

4 Create a hanging mobile of three-dimensional geometric shapes using plastic, cardboard, paint, string and coloured paper. You might like to do this as a class where each student makes one shape or prism.

SCIENCE: BUILT ENVIRONMENT

From house to home, learn about sustainability, architecture and how we come to love the buildings we use with artists Joseph Griffiths and Randi & Katrine.



Randi & Katrine, *Towerman*, 2012, sculptural installation, $6 \times 3 \times 4 \text{ m}$. Installation view (2012) at Hanbit Media Park, Seoul. Courtesy the artists; Korean Foundation and Gallery Factory, Seoul. Photograph: Chin Hyosook



Joseph Griffiths, Shelters, 2012 (detail), collected timber, building waste, steel, aluminium, corrugated-iron, fishing nets, bamboo, glass, PVC, rope, tape, paint, safety lights, megaphone, fishing floats, pontoon, fern, 2.6 x 4 x 4 m. Courtesy the artist. Photograph: Chris Pennings. Artwork appears in full on page 39



JOSEPH GRIFFITHS

Born 1984 in Melbourne, Australia Lives and works in Barwon Heads, Australia

The structure that Joseph Griffiths has built on Cockatoo Island looks like it could be from the past or an **apocalyptic** future. Perhaps it's a **relic** from a lost world? The artist has used references from past architectural styles to create a **futuristic** building.

Joseph Griffiths is interested in the ways in which different cultures build shelter to protect themselves from the environment. Future Archaeology (2014) was made using simple tools and recycled materials inspired by different structures such as Icelandic turf houses and Mesopotamian temples. Through the visual appearance of the building the artist also raises concerns about **sustainability** and the environment in which we live.

Future Archaeology (2014) looks to be straight out of the pages of our favourite childhood stories and fairytales. Although this building provides shelter and protection, the structure also inspires our imagination. Through the work, the artist provokes the audience to observe, think, discover and play. Perhaps we might think about what our buildings will look like a hundred years from now.



APOCALYPTIC: Describing or alluding to the complete destruction of the world.

RELIC: A surviving memorial of something past.

FUTURISTIC: Of or relating to the future.

SUSTAINABILITY: The quality of not being harmful to the environment or depleting natural resources, and thereby supporting long-term ecological balance.

Cover: Joseph Griffiths, *Shelters*, 2012, collected timber, building waste, steel, aluminium, corrugated-iron, fishing nets, bamboo, glass, PVC, rope, tape, paint, safety lights, megaphone, fishing floats, pontoon, fern, $2.6 \times 4 \times 4$ m. Courtesy the artist. Photograph: Chris Pennings

Above: Joseph Griffiths, *Improvised Architecture*, 2011, collected timber, Laminex, fruit container, ink, $1.2 \times 15 \times 3$ m. Courtesy the artist



RANDI & KATRINE

Randi Jørgensen born 1974 in Kolding, Denmark Katrine Malinovsky born 1976 in Hellerød, Denmark Live and work in Copenhagen, Denmark

A house is very different to a 'home' – a house is just a building, but a home suggests something more personal. Just as we decorate our rooms to express our personality and individuality, we can do the same with our homes – from the colours we paint our walls, to the lush gardens in which we play. Randi & Katrine work **collaboratively** to bring buildings to life, creating houses with human features to express the idea that architecture has just as much imagination as we do.

On Cockatoo Island, Randi & Katrine have created a Danish village that consists of five **anthropomorphic** houses, complete with bell and gate towers wrapped by a city wall. As the audience walks through the village, sound, light and chimney smoke comes from the houses and towers. Our imagination runs wild as we dream away to another time and place where buildings whisper to each other, sharing stories about life in the village.

COLLABORATIVELY: Working with another or others on a joint project.

ANTHROPOMORPHIC: Giving human form or attributes to a being or thing not human.



Cover: Randi & Katrine, *The House in Your Head*, 2008, sculptural installation, dimensions variable. Installation view (2008) at Gl Strand Gallery of Modern and Contemporary Art, Denmark. Courtesy the artists. Photograph: Anders Sune Berg

Left: Randi & Katrine, *Towerman*, 2012, sculptural installation, $6 \times 3 \times 4 \text{ m}$. Installation view (2012) at Hanbit Media Park, Seoul. Courtesy the artists; Korean Foundation and Gallery Factory, Seoul. Photograph: Chin Hyosook

JOSEPH GRIFFITHS (ST3-14BE, ST3-5WT)

- Research different shelters and structures from history. What materials and techniques were used to build the structure? Who was the shelter built for? What time in history does this shelter belong to?
- 2 Brainstorm a list of ways we could live more sustainably. This may include changes to our architecture and design, different kinds of appliances or new technologies, and could affect things like heating and cooling, transport or electricity usage.

Select two of these and research how they were invented and how they work. Create a visual presentation of your research including images and diagrams.

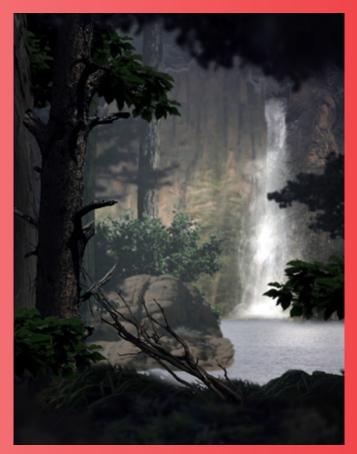
- Using paddle pop sticks, clay, glue, cardboard and other material create your own structure or home. Before embarking on your construction, write a written plan of what you are going to do and how you will do it. As a part of your plan:
- A List the characteristics required of your structure, what are the essentials that people will need from this building?
- **B** Write a list of the materials available to you and what you plan to use them for.
- **C** Write a list of the tools you will need to create your structure such as scissors, a flat board for the base etc.
- **D** Draw a sketch of your structure and label the elements in it.
- **E** Write some steps of your process, where will you start? What piece will you add last?
- **F** Once you have built your structure write an evaluation of how you think it went. What were your challenges? Did you find planning helped when you were making?

RANDI & KATRINE (ST2-14BE, ST3-14BE)

- In Randi & Katrine's work they have developed a scaled construction of a Danish village. Often cities or towns are built in a specific configuration for specific reasons. This process is called town planning. Undertake some research about town planning. Why is it useful?
- 2 Examine the image of their work and answer the following questions. Why do you think the houses are in a circle facing one another? In a small village what would be the key roles or purposes of each building? You might like to think back to movies or documentaries you've seen that are from around this time. What is the purpose of the wall around the village?

SCIENCE: LIVING WORLD

Imagine Bambi without 'Bambi'? In this section, explore the different ways artists reflect upon the relationship between people and the natural world.



Broersen & Lukács, *Mastering Bambi*, 2010 (video still), HD video, 12:30 mins. Courtesy the artists and AKINCI, Amsterdam.

Artwork appears in full on page 45





Top: Yhonnie Scarce, *Blood on the Wattle*, 2013 (detail), 292 pieces of blown glass, perspex, steel, aluminum and fabric, 60 x 210 x 70 cm Courtesy the artist and dianne tanzer gallery + projects, Melbourne Photograph: Janelle Low. Artwork appears in full on page 49

Bottom: Sol Archer, *Palace in the Left*, 2011 (video still), HD video, 14:40 mins. Courtesy the artist and Dreck.co.uk



BROERSEN & LUKÀCS

Persijn Broerson born 1974 in Delft, The Netherlands Margit Lukàcs born 1973 in Amsterdam Live and work in Amsterdam, The Netherlands and Paris, France



Cover and above: Broersen & Lukács, *Mastering Bambi*, 2010 (video still), HD video, 12:30 mins. Courtesy the artists and AKINCI, Amsterdam

Take a close look at the video artwork by Broersen & Lukács and you will probably feel like something is missing. The artists have re-created scenes from the classic Disney film Bambi in their work titled *Mastering Bambi* (2010). The difference is that their version is made without the animals.

Removing the main characters from a movie seems like a strange thing to do. But spend some time with the images. How do you feel? Calm? Scared? In awe? Experiencing nature can have a meaningful effect on people. The artists have removed the animals so we can focus on the feelings that nature can inspire within us.

The work also reminds us of the importance of our natural environment. Today it's hard to find nature that isn't affected by people. Have you ever experienced an environment where there are no walking tracks, no signs or reminders of human civilisation? Nature and the environment is important to us not just because of the feelings that it can evoke but because it sustains us with water, minerals, food and animals. By removing all signs of human and animal life from the landscape, we are reminded of our delicate relationship with the natural world.

AWE: An overwhelming feeling of respect, admiration or fear that is produced by that which is grand or powerful.



SOL ARCHER

Born 1983 in Hiroshima, Japan Lives and works in London, England

Ever wanted to be an expert marine biologist? Perhaps an aeronautical engineer? Well, with the internet, you can!

Sol Archer is interested in how people use the internet to find information and learn about anything and everything. Using the web to research different ideas or professions, we suddenly become experts, even though we may never have actually set foot in an aquarium or tinkered with the buttons in an aeroplane cockpit.

The way we browse online sometimes leads us to webpages that we may not have originally intended to see. With this idea in mind, Archer describes this web of endless information as a 'software ecosystem' in his videos. The artist pairs images of the natural world with neverending and sometimes confusing information using an archive of video footage he has captured over many years. The artist hopes to make people aware of the way we organise, use and understand the information we find in our technology-filled world.



ECOSYSTEM: A biological community of interacting organisms and their physical environment.

ARCHIVE: A collection of historical documents or records providing information about a place, institution, or group of people.

Cover: Sol Archer, *Palace in the Left*, 2011 (video still), HD video, 14:40 mins. Courtesy the artist and Dreck.co.uk

Left: Sol Archer, *Black Sun*, 2013 (video still), HD video Courtesy the artist



YHONNIE SCARCE

Kokatha and Nukunu people Born 1973 in Woomera, Australia Lives and works in Melbourne, Australia

Which foods best represent your personality or culture?

Yhonnie Scarce creates beautifully crafted bush bananas, plums and long yams made from glass. These fruits, vegetables and plants are extraordinary because they symbolise Indigenous Australians, their culture and traditions. The artist uses her personal history and experiences to explore the forced removal of Indigenous people from land and family.

Scarce is producing a new work for the 19th Biennale of Sydney that shows a number of broken and fragile indigenous plants and seeds. Each plant represents an Indigenous person who has been treated unjustly. Although these objects are **striking** and beautiful, we are reminded of Australia's darker history. The artist uses glass as a symbol of the strength and courage of Aboriginal and Torres Strait Islander communites following British colonisation.



STRIKING: Impressive and attractive.

Cover: Yhonnie Scarce, *Blood on the Wattle*, 2013, 292 pieces of blown glass, perspex, steel, aluminum and fabric, $60 \times 210 \times 70$ cm. Courtesy the artist and dianne tanzer gallery + projects, Melbourne. Photograph: Janelle Low

Left: Yhonnie Scarce, Not Willing to Suffocate, 2012 (detail), glass and painted metal, $65 \times 15 \times 20$ cm each. Courtesy the artist and dianne tanzer gallery + projects, Melbourne. Photograph: Janelle Low

BROERSEN & LUKÀCS (ACSSU094, ST2-11W, SC4-15LW)

- Broersen & Lukács' work shows a number of different environments. See you if you can list and describe a few of them. Are they cold and windy? Warm? Wet?
- 2 Pick two of the environments you saw in the video. Using your descriptions fill in the types of animals and plants that are missing from the landscape. Are there big trees or small grasses? Explain why you matched certain types of animals and plants to your chosen landscapes.
- Broersen & Lukács' work tries to make us think about how humans impact on their environment. In groups of two or three research one of the following environmental issues: global warming, water pollution, waste disposal.

From your research list what you think are three effects of this problem, three main causes of your chosen issue and three things people could do to solve or contain the issue.

Compare and contrast the images and information seen and heard in Archer's videos. What images are presented? How does the information relate to these images? What does this say about our relationship to the natural world?

- 2 Brainstorm a list of formats where we find information (online, in newspapers, books, encyclopedias, etc.). Identify how this information has been used over time and in different cultures. Which format do you think is the most effective for giving people information? Is there any format of information that is no longer used today? Why do you think this is so?
- Research a natural living system, such as a plant or animal life cycle. Create an animation that includes many collages and drawings of this natural living system. Record yourself reading the information you found in your research as a soundtrack to the animation.venus fly trap.

YHONNIE SCARCE (ST3-11LW, ST3-10LW)

- Scarce crafts Australian native flora into sculptures in her practice. Flora is the technical term for living plant life. Research some Australian native flora such as the Kakadu Plum, Kangaroo Paw, Gum Tree. What physical features of these plants have helped them adapt to the harsh Australian climate?
- With your class collect some Australian
 Native flora and some other introduced fruits,
 vegetables and plants like lilies, apples and oranges.
 Set these things up on a table in a beautiful display.
 Using wax crayons or a media of your choosing
 draw this still life on an A3 piece of paper. What is
 the difference in the colours you are using and
 they way you draw the native plants compared
 with the introduced ones?

Explore some scientific reasoning behind this difference in colour palette.

Note: this is a video work and will need to be viewed in full in order to complete the above questions.

SCIENCE: PHYSICAL WORLD

Gadgets, gizmos, whirly and wonderful bits and pieces; see how artists Ross Manning and Gerda Steiner & Jörg Lenzlinger use physics, technology, light and found objects to create their artworks.



Gerda Steiner & Jörg Lenzlinger, *Meanwhile in the bush...*, 2010, interactive mixed-media installation, dimensions variable. Installation view of 'Wild Things' at Kunsthallen Brandts, Odense. Courtesy the artists. Photograph: Gerda Steiner & Jörg Lenzlinger. Image appears in full on page 55



Ross Manning, *Spectra*, 2012 (detail), coloured fluorescent tubes, oscillating fans, wires, wood, cables, dimensions variable. Courtesy the artist and Milani Gallery, Brisbane. Photograph: Alex Cuffe. Artwork appears in full on page 53

ROSS MANNING



ROSS MANNING

Born 1978 in Brisbane, Australia Lives and works in Brisbane

Ross Manning is interested in the qualities of light and energy. Part sculpture, part scientific experiment, Manning's artworks use everyday objects to test and explore the laws of physics. His **mesmerising** moving sculptures often consist of **fluorescent** lights that slowly rotate or shift, casting their light onto nearby surfaces. In this process the colours produced by the lights blend andmorph on the walls to create new **hues**.

To rotate the independent parts of his sculptures, the artist uses household items, such as handheld fans, which form a very visible part of the work. For Manning, the most important aspects of his artworks are the exploration of ideas and the observation of the results of his assemblage. Unlike artists who are secretive about their materials and processes, Manning doesn't feel the need to be mysterious about how the work was made or how it operates.

The artworks exhibited as part of the 19th Biennale are part of Manning's 'Spectra' series. 'Spectra' is plural for the word 'spectrum', a term used to describe the rainbow of colours that make up visible light. You can see these colours produced when holding up a prism to sunlight.

MESMERISING: To fascinate or spellbind.

FLUORESCENT: A lighting fixture that utilises an electric discharge to light up phosphors coating the inside of a tube.

HUE: A gradation or variety of a colour.

ASSEMBLAGE: A sculptural technique of organising or composing into a unified whole a group of unrelated and often fragmentary or discarded objects.



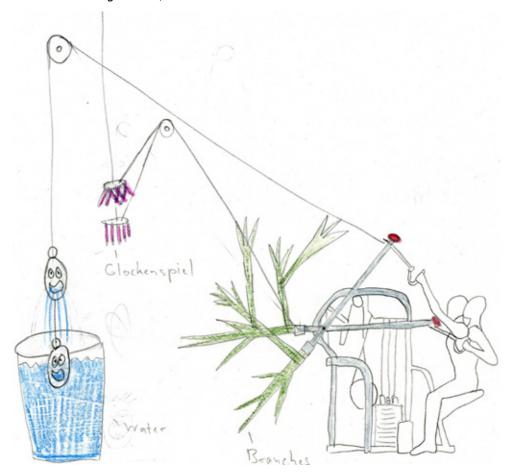
Cover: Ross Manning, *Spectra*, 2012, coloured fluorescent tubes, oscillating fans, wires, wood, cables, dimensions variable. Courtesy the artist and Milani Gallery, Brisbane. Photograph: Alex Cuffe

Above: Ross Manning, *Spectra Cluster*, 2013, coloured fluorescent tubes, oscillating fans, wires, wood, cables, dimensions variable. Courtesy the artist and Milani Gallery, Brisbane. Photograph: Tony Nathan



GERDA STEINER & JÖRG LENZLINGER

Gerda Steiner born 1967 in Ettiswil, Switzerland Jörg Lenzlinger born 1964 in Uster, Switzerland Live and work in Langenbruck, Switzerland



Cover: Gerda Steiner & Jörg Lenzlinger, *Meanwhile in the bush...*, 2010, interactive mixed-media installation, dimensions variable. Installation view of 'Wild Things' at Kunsthallen Brandts, Odense. Courtesy the artists. Photograph: Gerda Steiner & Jörg Lenzlinger

Above: Gerda & Jorg, Artist Sketch, 19th Biennale of Sydney Project Proposal, February 2013

Energy doesn't just come in the form of electricity – its main source is the sun. Plants turn the sun's energy into food, animals eat plants, animals eventually die, their bodies then decompose and the nutrients from their bodies are absorbed into the soil. The cycle of energy exchange repeats in this manner and has done so for millions of years.

The artwork on Cockatoo Island by Swiss artists Gerda Steiner and Jörg Lenzlinger looks at this process of energy transfer and the idea that everything in our world is interconnected. They have created an artwork made specifically for this site, an environment where members of the public use their energy to make the artwork come alive. By jumping on one of the modified exercise machines, the energy you expend will create movement and sound in the artwork.

If you examine the work, you will see that it's made of many different things. Paper, plastic, plant material and many other objects come together to create a fantastical universe of flotsam and jetsam. It's like its own little ecosystem that we can use to reflect on the complex relationships between things in the world.

People need energy to move, to think, to make things and to exercise. It's interesting to think about what kinds of energies went into this work – from the energy of the artist, to the trees that made the paper and string.

ROSS MANNING (ACSSU097, ACSSU097, ACSSU097, ST3-6PW)

Colour theory is an important concept to art but it also relates to science too. The first sculpture in Ross Manning's Spectra series combined red, yellow, blue and green lighting to create white ("colourless") light.

Using the Internet undertake some research about 'colour theory'. What are your findings? Summarise your results and glue them into your workbook. Working with your teacher and class create a colour wheel that shows primary and complementary colours.

Learn more about colour theory or print a colour wheel for yourself <u>here</u>

2 Create your own rainbow and explore how colour is affected by intervening with water. Cut open a coffee filter so it can lay flat. Using textas, draw squares of colour next to one another. Now hang up everyone's drawings and spray with water using a spray bottle. Wait to see any changes. What happens to the colours? Observe your results.

You can explore the same scientific principles as the artist by making your own prism with the following materials; glass half full of water, piece of paper and a sunny day. Go outside and sit the glass of water on your paper. Tilt it on an angle and move it around to get the best rainbow. Where did the rainbow appear? Describe the situations and what you did.

In order for the lights in his sculpture to work Ross needs to create an electric circuit. Check out his drawing of an electric circuit on the next page. Undertake some research to label and explain what is happening in this circuit. How does the electricity move from the power source through the artwork? (Hint: he has used different colours to show which way the electricity is moving)

GERDA STEINER & JÖRG LENZLINGER (ST3-11LW, ST3-10LW, ST2-4WS, ST3-6PW)

- Gerda Steiner & Jörg Lenzlinger's sculpture transfers human energy into movement and sound. Can you think of anything else that transfers energy (like electricity) into sound, light, heat or movement? List as many as you can.
- Research different types of energy such as heat, light and kinetic energy. How is this energy generated? What are some of the human uses for these types of energy?
- Undertake a research project about how electricity is stored and moved from place to place. Paste your findings on a storyboard with images. Make sure you answer some of the following questions. What are some of the ways that electricity generated? Where is electricity stored? How do people like you or me get electricity?

ROSS MANNING

Ross Manning has drawn us a circuit for one of his installation works. Undertake some research about circuits online and answer the following questions.

Has Manning programmed the electrics of his artwork in series or in parallel?

Which direction do you think the energy is flowing?

Design your own simple circuit and then bring it to life using the following pieces of equipment. If you need help you should be able to find instructions online.

- 1 Paper
- 2 Pen
- 3 Wire (AWG 18 gauge or similar)
- 4 Knife
- 5 Wire strippers
- 6 Electrical insulating tape
- 7 1.5-volt battery (AA or similar size)
- 8 1.5-volt light bulb (regular flashlight bulb)

Right: Ross Manning, Artist Sketch, 2013

