



COLOUR

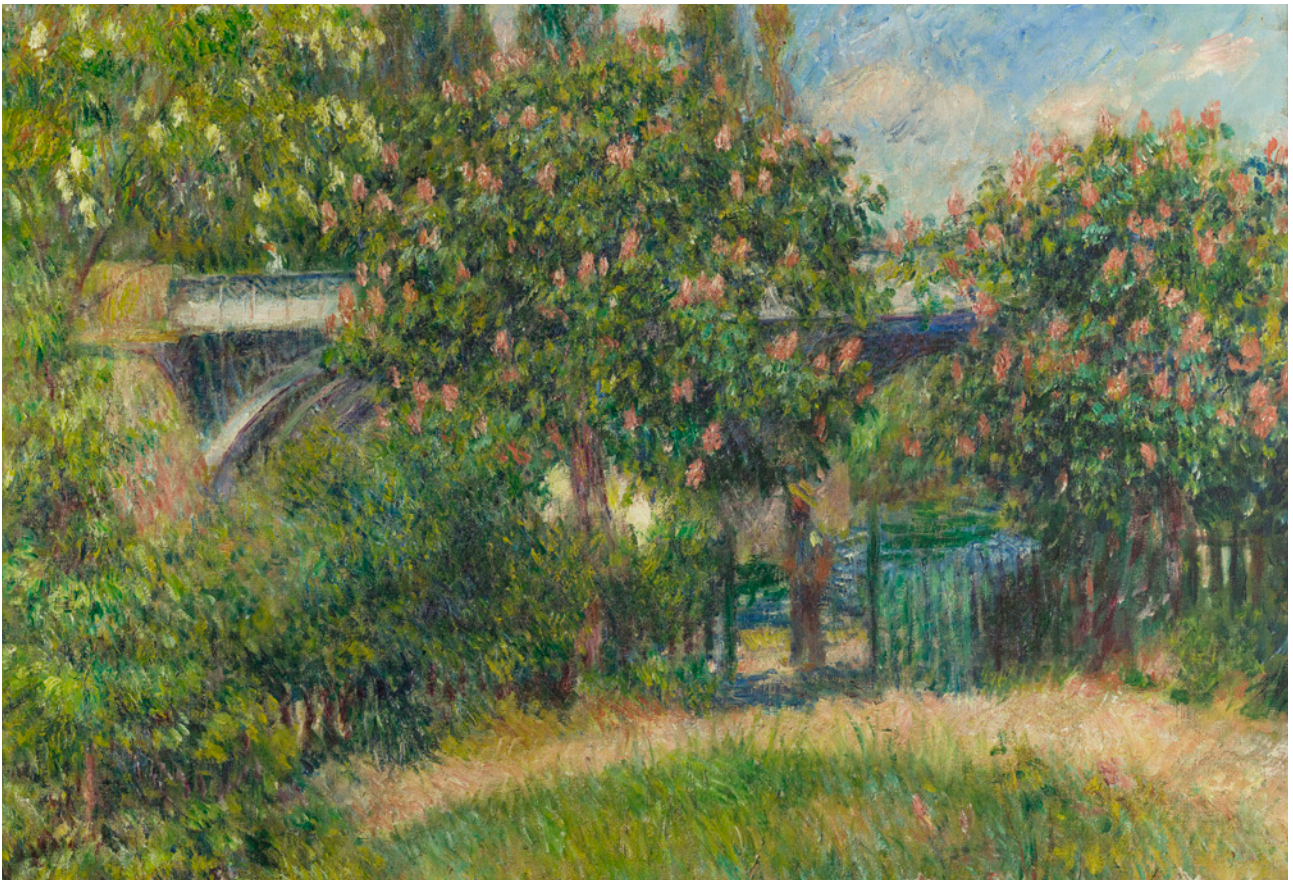
Part one: Impressionism

ART GALLERY OF SOUTH AUSTRALIA

NORTH TERRACE, ADELAIDE Open daily 10am–5pm artgallery.sa.gov.au



TRUE COLOURS: COLOURS OF IMPRESSIONISM



Colours of Impressionism: Masterpieces from the Musée d'Orsay presents a new opportunity for Learning at the Gallery to unpack one of the most fundamental elements in the history of art; colour. Much like the exhibition itself, is interpretive resource focusses on the crucial role colour plays in painting. The French Impressionists provide a springboard for understanding the key shifts in painting styles and techniques, development in pigment production and ways in which we read colour.

This resource establishes the foundation from which colour can be dissected and analysed for and by students, providing pivots for students to unpack the science of how we see and respond to colour. Students are also presented with opportunities to investigate methods devised by Impressionist painters that were used to capture fleeting atmospheric effects including reflected or refracted light.

The relationship between art and science is addressed not only in an optical sense, but also by delving into the

history of how pigments were developed. The surprising methods for making pigments are intriguing for learners of all ages. For example, crimson was derived from dried bodies of kermes, a scale insect that fed on a type of oak tree, found in the Mediterranean. The vibrant pigment known as Indian yellow on the other hand was made from the urine of mango-fed cows. And for hundreds of years, one small area in northern Afghanistan was the only known source of the semi-precious stone lapis lazuli, used to make ultramarine, a rich deep-blue pigment more precious than gold. (A synthetic ultramarine was finally formulated in the nineteenth century).

Many of these original methods are now obsolete, but the pigment known as lead white continues to appeal to contemporary painters despite its toxic properties. In fact, this type of white contains the highest quantities of lead to all its peers on the palette. Colour is a multifaceted topic and these comprehensive stories will be woven into the Gallery's many learning programs to enable students to see colour and art in a new light.

image detail: Auguste Renoir, France, 1841–1919, *Pont du chemin de fer à Chatrou* (Railway bridge at Chatrou), 1881, oil on canvas, 54.5 x 65.5 cm ; Bequest of Gustave Caillebotte, 1894, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/René-Gabriel Ojéda.

image detail (cover): Camille Pissarro, France, 1830–1903, *Prairie à Éragny*, 1886, Éragny, France, oil on canvas, 59.4 x 73.0 cm; Gift of the Gwinnett Family, James and Diana Ramsay Foundation, Roy and Marjory Edwards Bequest Fund, Margaret Olley Art Trust, Helen Bowden, Frank and Mary Choate, Peter and Pamela McKee, Emeritus Professor Anne Edwards AO, David and Pam McKee, and Members through the Art Gallery of South Australia Foundation Masterwork Appeal 2014, Art Gallery of South Australia, Adelaide.

IMPRESSIONISM

Nineteenth century French Impressionism transformed contemporary attitudes towards both what was acceptable as art and what could be represented in art. It was an approach to picture making focussed on recording the ephemeral effects of light in both the natural world and the built environment.

Impressionist artists such as Paul Cezanne, Claude Monet, Berthe Morisot, Camille Pissarro and Pierre-Auguste Renoir, also rejected the traditions of history painting. Instead these artists captured the experience of modern life, which had changed significantly for Parisians with the transformation of Paris. With the support of Napoleon III, prefect of the Seine Department of France, Baron Haussmann (1809–1891) initiated major urban renewal projects between 1853 and 1870 resulting in more railways, improved sanitation, water supply, the demolition of overcrowded neighbourhoods and the building of new amenities.

Characterised by fragmented detail, an emphasis on full strength primary colours, movement and lack of outlines, the Impressionists captured the changing qualities of light, often depicting these moments *en plein air* (open air or outside) rather than in a studio. Driven by scientific theories of colour, the Impressionists were ridiculed for their rapid brushwork, broken colour, the unfinished quality of their paintings and the choice of ordinary subject matter.



WHAT IS BROKEN COLOUR?

Broken colour is when two different colours are placed next to each other onto the canvas to optically blend (rather than on the palette) to create the sensation or effect of light.

TIP: See part two for more information on the science of colour which informed the Impressionists.

image detail: Claude Monet, France, 1840-1926, *La cathédrale de Rouen. Le portail et la tour Saint-Romain, plein soleil* (Rouen Cathedral: the portal and Saint-Romain tower, full sunlight), 1893, oil on canvas, 107 x 73.5 cm; Bequest of Count Isaac de Camondo, 1911, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/Thierry Le Mage.

EARLY YEARS

RESPONDING

Fascinated by changes in atmosphere, the Impressionists depicted both warm and cool scenes. Select a work of art which, if you could step inside the painting, would be a cold environment. Which would be hot?

Choose your favourite Impressionist landscape. Describe what it would be like to live here.

Although the main subject matter for Impressionist painters included landscapes and scenes of everyday life, some paintings depicted people. Select a painting of a figure. What does this painting tell you about this person and the life they lived?

MAKING

Impressionist paintings present a great opportunity to learn about colour theory. Overlap and experiment with primary coloured tracing paper or acetate to make secondary colours. Hold the paper up to a window so the light can reveal the colours you have created. What colours have you made? Make some predictions about what would happen if you combined a primary and a secondary colour. Continue experimenting – how many different colours can you make?

Create the colour wheel using only coloured tracing paper or acetate.



PRIMARY

RESPONDING

After looking at the range of Impressionist paintings, make a list of things you noticed that were similar about the subject matter and techniques. In small groups, share your findings and identify three key characteristics of Impressionism. **TIP:** You could try this activity with other art movements too.

- Locate an Impressionist painting where the artist has depicted movement. How have they achieved this effect?
- Choose one painting that has the most energy and one which is calm. What characteristics led you to your selections?
- If the Impressionists did not use black to create shadows, how have they captured realistic shadows? Find an example to support your observation.
TIP: As a class, first look at *The Magpie* (1886–87) by Claude Monet.

MAKING

Colours of Impressionism traces the development of colour in the nineteenth century. Research other Impressionist exhibitions that have been held throughout the world. Imagine you are a curator about to stage a new Impressionist exhibition like none other seen before. What curatorial approach will your exhibition take? Will it include paintings that capture a particular subject matter or time of day or works by certain artists? Select 5 works of art for your hypothetical exhibition and present your selection to your class.

image detail: Claude Monet, France, 1840–1926, *La pie (The magpie)*, 1868–1869, oil on canvas, 89 x 130 cm; Purchased by the French state, 1984, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/Hervé Lewandowski.

SECONDARY

MODERN HISTORY – UNDERSTANDING THE MODERN WORLD

Use a selection of Impressionist paintings to develop and sustain an argument about the social changes in Europe during the nineteenth century.

TIP: Investigate the economic impact of the French Revolution and its transformation of status and leisure.

Broken colour is a common feature in Impressionist paintings. Find the best example of a nineteenth century Impressionist painting that utilises broken colour.

Painter Berthe Morisot (1841–1895) was a celebrated artist of her time and a founding member of the French Impressionist movement. Investigate Morisot's development as an artist and role in the Impressionist movement. Compare her work to other female painters

of the time such as Marie Bracquemond and Mary Cassatt. Discuss the role these artists played as essential figures within the Impressionist movement and the development of modern art in Paris in the second half of the nineteenth century.

In the nineteenth century oil paints were a popular medium to work with. Consider the works of art you have encountered lately. What are popular materials that are used by artists today?

Investigate art movements that followed Impressionism. Divide the class into small groups and conduct a debate on the topic "Impressionist artists paved the way for modernism".

DID YOU KNOW?

Berthe Morisot was also a friend, model and muse to Édouard Manet (1832–1883), appearing in many on his paintings such as *The Balcony*, 1868–68.



image detail: Gustave Caillebotte, France, 1848-1894, *Vue de toits (effet de neige)* (*Rooftops in the snow [snow effect]*), 1878, oil on canvas, 64.5 x 81 cm; Gift of the artist's brother Martial Caillebotte, 1894, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/Martine Beck-Coppola.

SECONDARY (Continued)

MAKING

Impressionists challenged what was acceptable as art and what could be represented in art, such as daily rural life. Spend time observing the routines you encounter in your life. Create a painting that captures a fleeting moment of one of these observations. Emphasise light and contrasting colours to create a painting that celebrates the contemporary world you live in today.

DID YOU KNOW?

The first Impressionist exhibition was in 1874 and included more than 200 works of art. Although critics and the public did not take this exhibition seriously and were shocked at the use of colour and choice of subject matter, Impressionism remains one of the most popular art movements in history.



THINK AND DISCUSS

You may find it surprising that during the early nineteenth century, the use of bold and pure colour was not popular, as it is today. Suggest a technique or style in contemporary art that is deemed unpopular, controversial or disliked, which 200 years from now, may become common practice.

image: Claude Monet, France, 1840-1926, *Champs de tulipes en Hollande* (Tulip field in Holland), 1886, oil on canvas, 65.5 x 81.5 cm; Bequest of Princess Edmond de Polignac née Winnaretta Singer, 1947, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/ Franck Raux.

TECHNOLOGY: THREE FRIENDS OF THE IMPRESSIONISTS

PHOTOGRAPHY

The invention and increased use of photography encouraged artists to explore and experiment, as they were no longer needed to depict notable people or places with incredible accuracy.

RAND'S PATENT COLLAPSIBLE TUBE

The invention of the collapsible screw top oil tube in 1842 made it possible for the Impressionists to paint outside. It was first patented by American artist John Rand in 1841 and was later manufactured by Winsor & Newton as "Rand's Patent Collapsible Tube".

NEW COLOURS

Due to discoveries in science and in particular the chemical industry, artists had greater access to a wide range of coloured paints. Previously pigments were expensive and difficult to get and in some cases these paints were toxic.

Chemist Louis-Nicola Vauquelin discovered chromium (a chemical element found in the environment), which was later instrumental in the manufacturing of chrome based orange and red pigments. In 1809 lemon yellow was invented, prior to this Indian Yellow was made from the urine of mango-fed cows. In 1826 ultramarine blue was developed, previously this colour was made by grinding the expensive semi-precious stone, lapis lazuli.

SCIENCE AS A HUMAN ENDEAVOUR – DEVELOPMENT ACROSS DISCIPLINES

The collapsible screw top oil tube meant that Impressionist painters could now paint outside with ease, thus this technology influenced the type of work artists were able to undertake.

- What new technologies have changed the way artists are working today?
- Investigate an artist and discuss how technology has influenced the type of work they are producing. How has this technique changed over time?
- Besides being used for artistic purposes, what other role does this technological advancement have in society? For example, consider the invention of plastics and development of synthetic silicones.

TIP: You might like to start with investigating Marc Newson's *Lockheed Lounge* in the Gallery's collection.



image: Marc Newson, Australia, born 1963, LC1 *chaise longue*, 1986, Sydney, aluminium on fibre glass body, rubber; 95.0 x 60.0 x 170.0 cm; South Australian Government Grant 1986, Art Gallery of South Australia, Adelaide, © Marc Newson Ltd.

EN PLEIN AIR



image detail: Alfred Sisley, Britain/France, 1839-1899, *La barque pendant l'inondation, Port-Marly* (Boat in the flood at Port-Marly), 1876, oil on canvas, 61 x 50.5 cm; Bequest of Count Isaac de Camondo, 1911, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/Sylvie Chan-Liat.

From 1860 *en plein air* (painting outdoors) became common practice for Impressionist painters. While some artists often documented preliminary sketches outside, the Impressionists believed in beginning and finishing their paintings outside. These artists tried to capture fleeting impressions of colour and light in the landscape.

MAKING

Imagine you are an Impressionist painter. Collect an easel or painting board, paper and adequate paint on an individual palette. Create an *en plein air* painting of your local area either near your home or within your school grounds. You may like to use a view finder to isolate one section of your landscape. Pay close attention to light and colour. Remember you want to create an impression of what the atmosphere was like in that particular moment.

Take a series of photographs of the same scene at ten different times of one particular day. Examine the light and colour you have captured at each interval. Which time of the day did you prefer? Compare your images to other members of your class.

TIP: Look at 365 sunsets, 2010–11 by Trent Parke

RESPONDING

What are the advantages and disadvantages of painting *en plein air*?

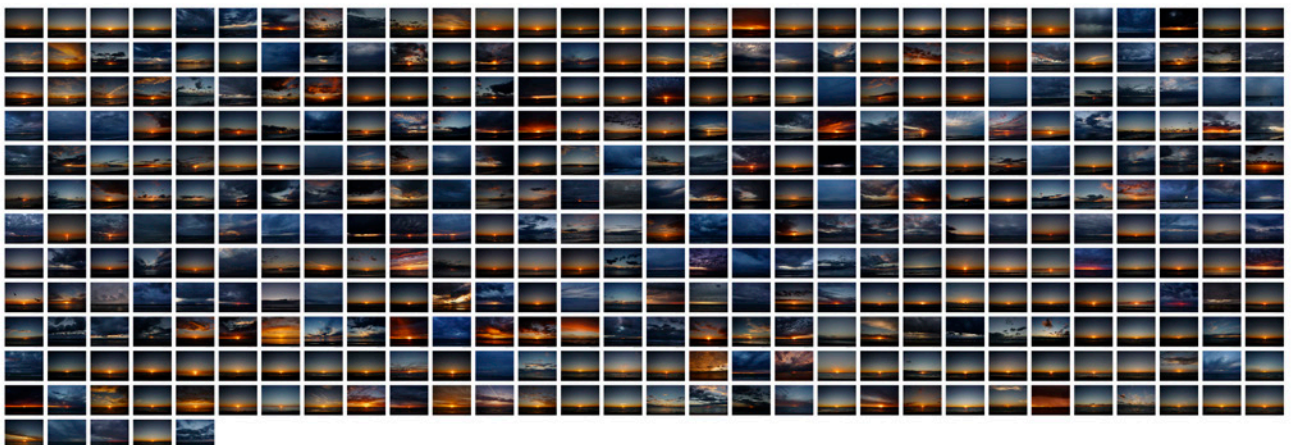


image detail: Trent Parke, Australia, born 1971, *365 sunsets*, Adelaide, 2010-11, Adelaide, 365 pigment prints; Gift of Macquarie Group through the Art Gallery of South Australia Contemporary Collectors Trent Parke Appeal 2015, Art Gallery of South Australia, Adelaide, © Trent Parke, courtesy of Hugo Michell Gallery, Adelaide, Stills Gallery & Magnum Photos

INFLUENCE OF JAPANESE PRINTMAKING ON IMPRESSIONISM

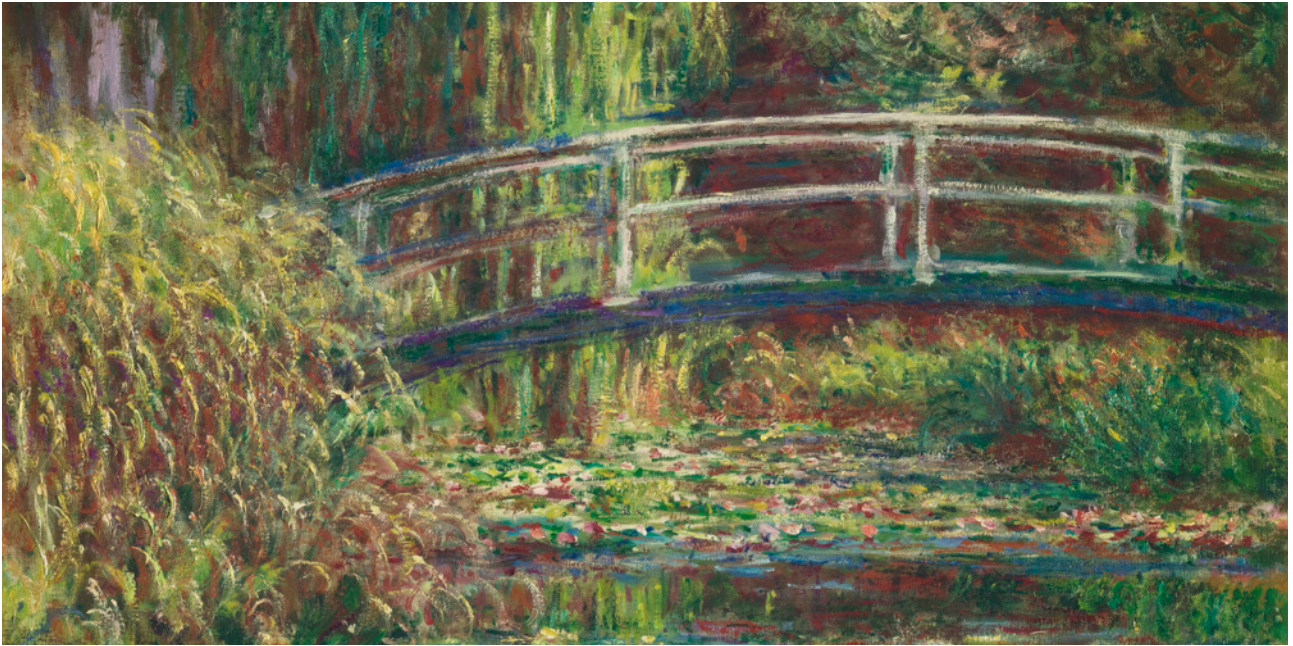


image detail: Claude Monet, France, 1840–1926, *Le bassin aux nymphéas, harmonie rose* (Water lily pond, pink harmony), 1900, oil on canvas, 90 x 100 cm; Bequest of Count Isaac de Camondo, 1911, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/Hervé Lewandowski.

In the mid-1800s Japan began to trade with Europe which resulted in new agreements between the East and the West. This prompted Japan to send products to major international exhibitions in Paris and London where the talents of Japanese art and craft workers were revealed to the Western world for the first time. In 1888 Samuel Bing, a Parisian art dealer, founded a new journal *Le Japon artistique*, to promote Japanese art and is credited with creating 'Japonisme', the fashion for Japanese art.

The colour, bold techniques and composition of Japanese woodblock prints in particular, appealed to Impressionist artists, as these images depicted both the natural world and the human figure in a new way. French artists purchased the highly coloured prints as they were relatively affordable. The intensified colour palette of Japanese prints inspired European artists to change their way of seeing and their portrayal of nature.



Claude Monet (1840–1926) was an early admirer of Japanese art, first noticing Japanese prints being used as wrapping paper in a food shop in Amsterdam. Monet was Influenced by Ukiyo-e woodblock prints (a genre of Japanese art that included depictions of folk tales, travel scenes, landscapes and flora and fauna), and went on to plant native Japanese plants in his garden in Giverny in northern France. His garden featured in many of his paintings and included water lilies and a Japanese footbridge, another sign of the Japanese aesthetic. Monet became an avid collector of Japanese woodblocks, with the walls in his home decorated predominantly with work by Katsushika Hokusai.

Katsushika Hokusai (1760–1849) was a Japanese painter and printmaker of the Edo Period (1603–1868), who drew on the landscape as a main source of inspiration. It was during the Edo period that print colours first appeared, prior to this black and white Buddhist prints were common. *Fuji in Fair Weather* c. 1830–32 is a four-colour woodcut on paper and is asymmetrical in its composition. Hokusai focusses on Japan's tallest and most sacred mountain, Mt. Fuji, as the dominating subject in this print.

image: Katsushika Hokusai, Japan, 1760–1849, *The Kintai Bridge in Suō Province (Suō no kuni Kintaibashi)*, from the series *Remarkable Views of Bridges in the various provinces (Shokoku meikyō kiran)*, c. 1834, colour woodblock print (nishiki-e), 24.4 x 35.6 cm; Gift of James & Diana Ramsay 1976, Art Gallery of South Australia,



RESPONDING

Compare *Kintai Bridge in Suo Province* by Katsushika Hokusai with *Water lily pond, pink harmony* by Claude Monet. Imagine these two works have been paired together in a new Impressionist exhibition. Why do you think the curator might place these works together? Research other Japanese printmaking from the nineteenth century. Pair another Japanese print with an Impressionist painting. What connections did you make between the two works of art you selected?

Research why Mt Fuji in Japan is considered a sacred site. Research sacred sites in Australia. Why are these places sacred? Brainstorm some things we should be doing to protect these places.

Examine other prints by Hokusai including the multiple views of Mt Fuji. Make an argument for how the work by Hokusai was an initial trigger for Impressionism in Europe. Take it further: Why not research modern artists who were also inspired by nineteenth century printmaking? What techniques and styles did modern artists of the west adopt from Japanese artists?

Hokusai was well known for his use of Prussian blue which was a foreign synthetic-made pigment imported from Europe via China. Locate other works of art in the Gallery's collection where blue has been used. Investigate the history of the colour blue. Why was blue such a rare pigment? List all the blue things found in nature. Why is blue rarely found in plants and animals?

MAKING

Japanese printmakers of the Edo period were recognised for their striking, asymmetrical compositions and use of bright colours. Using these elements create a print of your favourite Australian landscape, flora or fauna.

Research Hokusai's collection of 'manga' sketches which depict the daily life and culture of the Edo-period of Japan. The word 'manga' means whimsical and spontaneous pictures. What do these drawings tell you about life in Japan during this time? Create a series of sketches that depict your observations of daily life. This may include your friends and family, social and political figures, architecture or nature.

NEO IMPRESSIONISM

Neo-Impressionism began in the late nineteenth century by Georges Seurat, with other artists such as Paul Signac and Camille Pissarro's son Lucien also moving toward Neo-Impressionist ideals. While they retained the principles of painting outside to capture light and atmosphere, they relied more on the scientific laws of colour contrast by the chemist Michel-Eugene Chevreul (1786–1889). Chevreul's 1839 book *The Law of Simultaneous Colour Contrast* examined the principles of harmony and contrast of colours and the visual perception of colour. He theorised that when two strokes of pure complementary colours are placed side by side an optical mixture occurs in the retina. This theory was adopted by the Neo Impressionists who were also known as Divisionists and Pointillists. They juxtaposed tiny strokes of opposing colour to make their paintings appear brighter. Seurat based his paintings on colour divisions, whereby colour was mixed in the eye rather than on the palette, believing this created a more realistic representation of light and greater luminosity. While tones were divided and pure colour sat side by side on the canvas it was up to the viewer, at a distance, to blend the tones and complete the painting.



image detail: Paul Signac, France, 1863-1935, *La bouée rouge* (The red buoy), 1895, oil on canvas, 81.2 x 65 cm; Gift of Pierre Hébert, 1957, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/Hervé Lewandowski.

RESPONDING

Pointillism is characterised by small dots painted side by side to form patterns or an image. A dot is a mark that has been used throughout art history and within a variety of cultures. Research the history of the dot pre-and post-pointillism. How has the symbol or technical application of the dot endured or changed? Find three different examples of how the dot has been used in visual arts.

TIP: Consider looking at historical and contemporary works of art as well as those from different cultures.

Research other moments in art history where artists have explored science and the nature of vision. Find examples of these and discuss the scientific threads within their work. **TIP:** Think about perspective, Op Art, kinetic art and contemporary 4D practices.



Bridget Riley, Britain, born 1931, *Seris 33, orange and magenta added to green and violet in two colour twist*, 1979, London?, gouache, pencil on paper, 64.0 x 91.5 cm; Gift of Diana Ramsay AO and the late James Ramsay AO 1999, Art Gallery of South Australia, Adelaide.

CAMILLE PISSARRO *PRAIRIE À ÉRAGNY*, (1886)

Camille Pissarro is one of the greatest masters of the French Impressionist and Neo Impressionist movements in the nineteenth century. His paintings are celebrated for the sensation of air, light and transparency they generate through his careful scientific colour analysis.

In the late 1860s, Pissarro, Monet and Renoir moved to Louveciennes and became fascinated by the possibilities of *en plein air* painting. However, the development of Impressionism was interrupted by the outbreak of the Franco-Prussian war in July 1870.



After being impressed by the work of British artist J.M.W. Turner, Pissarro confirmed that he and Monet were right in their *en plein air* pursuit of light and atmosphere. They were particularly impressed by Turner's depiction of snow and fog, realising that such dazzling effect was not created by a solid mass of white, but by diverse colours jostling side-by-side.

From the late 1870s the period of late Impressionism, Pissarro worked to broaden his practice. Unlike Monet, he did not explore atmospheric variations but he did vary his subjects. He was constantly questioning and developing his technique in relation to his evolving artistic theories. After meeting George Seurat (inventor of the pointillist technique) in 1885, Pissarro began to radically modify his approach to painting in line with this new movement, which he saw as the next logical advancement of Impressionism.

In 1884, Pissarro and his family moved to the French village of Éragny. Inspired by the beauty of his surrounds, Pissarro began to develop his largest and most significant body of landscape paintings. His finest example from this period is *Prairie à Éragny*, 1886 which reveals a freshness and vitality in both his use of colour and brushwork.

Prairie à Éragny, is a superb example of an Impressionist painting, created at the height of the movement. The palette of warm pinks and mauves, vivid greens and bright powder blues is iconic, depicting the landscape through colour juxtapositions, which was applied directly to the canvas in short brush strokes. *Prairie à Éragny's* shimmering luminosity (perceived brightness) is attributed to Pissarro's adaption of the emerging Neo-Impressionist technique whereby dots of pure colour, one next to the other in specific contrast, combine optically (at an appropriate distance) to achieve maximum luminosity.

image: Camille Pissarro, France, 1830–1903, *Prairie à Éragny*, 1886, Éragny, France, oil on canvas, 59.4 x 73.0 cm; Gift of the Gwinnett Family, James and Diana Ramsay Foundation, Roy and Marjory Edwards Bequest Fund, Margaret Olley Art Trust, Helen Bowden, Frank and Mary Choate, Peter and Pamela McKee, Emeritus Professor Anne Edwards AO, David and Pam McKee, and Members through the Art Gallery of South Australia Foundation Masterwork Appeal 2014, Art Gallery of South Australia, Adelaide.



image detail: Camille Pissarro, France, 1830–1903, *Allée de la Tour-du-Jongleur et maison de M. Musy, Louveciennes* (*Tour-du-Jongleur Lane and M. Musy's house, Louveciennes*), c. 1872, oil on canvas, 52 x 81 cm; Bequest of Enriqueta Alsop on behalf of Eduardo Mollard, 1972, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/René-Gabriel Ojéda.

RESPONDING

What is the first thing you noticed about the image *Prairie à Éragny*?

What time of day is it in this scene? What season is it?

What colours do you see when looking at Pissarro's painting close up? Step further away, what colours do you see now?

MAKING

Experiment with different primary and secondary coloured paper side by side. Which is the brightest? Which colour appears the least vivid when next to other colours? In small groups discuss your observations.

PRIMARY

RESPONDING

View *Prairie à Éragny* at a close distance, now step further away and look again. How does *Prairie à Éragny* change?

Look closely at *Prairie à Éragny*. Now close your eyes. What was the first thing you remember about this painting?

Imagine being in this scene. Describe your surroundings and what the day is like.

Use a view finder to look closely at *Prairie à Éragny*. Describe the brushstrokes Pissarro has used. Compare Pissarro's brushstrokes to another Impressionist artist. How do their techniques differ?

TIP: Look at Paul Signac in the Gallery's collection.

MAKING

Create a landscape collage using coloured tracing paper. Tear the paper and use a window to shine light through your image. Experiment with making areas of your collage lighter and darker without using black or white paper.



image detail: Camille Pissarro, France, 1830–1903, *Prairie à Éragny*, 1886, Éragny, France, oil on canvas, 59.4 x 73.0 cm; Gift of the Gwinnett Family, James and Diana Ramsay Foundation, Roy and Marjory Edwards Bequest Fund, Margaret Olley Art Trust, Helen Bowden, Frank and Mary Choate, Peter and Pamela McKee, Emeritus Professor Anne Edwards AO, David and Pam McKee, and Members through the Art Gallery of South Australia Foundation Masterwork Appeal 2014, Art Gallery of South Australia, Adelaide.

SECONDARY

RESPONDING

What is the optimum distance to view *Prairie à Éragny*?
E.g. When does the painting appear the brightest or most luminous?

Investigate the scientific developments that occurred during the nineteenth century that prompted Pissarro to change the way he was painting. Use works of art that demonstrate scientific advancement in either physics and biology (how we see colour) or chemistry (the way colour was made).

Pair *Prairie à Éragny* with one contemporary work of art. What led you to make your selection? With a partner, discuss the connections you made between these two works.

Lucien Pissarro was Camille Pissarro's eldest son and also a talented artist. Compare works by Lucien to that of Camille Pissarro. Suggest how Camille influenced Lucien's work and find an example where Lucien was influenced by another artist or where he adopted his own unique style.

MAKING

Using a Neo Impressionist approach of placing complementary colours side by side, create a painting of your favourite place.

AUSTRALIAN IMPRESSIONISTS



French Impressionism influenced many nineteenth century Australian painters including Charles Conder, Frederick McCubbin, Tom Roberts, Peter Russell, Arthur Streeton and Jane Sutherland. These artists adopted painting *en plein air*, after Tom Roberts returned from Europe in 1885 where he had seen French Impressionist paintings first hand.

The Australian Impressionists adapted some elements of French Impressionism and developed their own style inspired by the natural colours of their landscape, depicting Australian narratives and capturing their general impression of colour and light in Australia. These artists embraced the outdoors, establishing artist camps near Heidelberg outside Melbourne as well as Box Hill and Mentone, painting coastal landscapes, the Australian bush and typical scenes of Australian life. They worked in the

hot Australian sun, applying paint quickly with large blocks and strokes of colours and tones, resulting in works that had a sketch-like quality. These rapid paintings depicted the fleeting, yet intense, Australian light and atmosphere of the city and rural landscape, which artists prior had not been able to capture.

The group held a landmark exhibition in 1889 held at the Buxton's Art Gallery, in Melbourne, called the *9 by 5 Impressionism Exhibition* (the title inspired by the size of the paintings made on cigar box lids). This generated mixed responses. Melbourne's more conservative art critics were outraged by the unfinished nature of the works, while others noted "the young and daring Impressionists were making an effort to engage amateur art-lovers by demonstrating what an artist's impression really means" (A lady representative, *The Evening Standard*, 17 August 1889).

image detail: Frederick McCubbin, Australia, 1855–1917, *A ti tree glade*, 1897, Melbourne, oil on canvas, 170.1 x 138.4 cm; Elder Bequest Fund 1900, Art Gallery of South Australia, Adelaide

TOM ROBERTS SAPLINGS, 1889



Born in England, Tom Roberts (1856–1931) moved to Australia in 1869 where he studied at the National Gallery School. He undertook further study in Europe from 1881–1885 where he was introduced to painting *en plein air* by Spanish artists Lorreano Barrau. Upon returning to Australia, Roberts became a key member of the Heidelberg School, which was an art movement in the late nineteenth century identified as Australian Impressionism and defined by artists who worked outside together in artist camps. Later he specialised in Australian narrative painting, and in portraits often commissioned by public figures and society patrons in Melbourne and Sydney.

Saplings, 1889 by Tom Roberts, painted with oil paint onto a cigar box lid, is an example of a 9 x 5 Australian Impressionist painting due to its size, subject matter and technical application. Painted *en plein air* *Saplings* zooms in on a small section of the landscape focussing on the spindly eucalyptus from a low perspective, typical of other paintings completed during this era at Box Hill. Later in the 1960s Australian painter Fred Williams (influenced by Cézanne) would develop Roberts' approach to landscape painting, reimagining composition and abstracting eucalypt saplings.

image detail: Tom Roberts, Australia, 1856–1931, *Saplings*, c.1889, Melbourne, oil on cedar panel, 34.5 x 14.5 cm; Morgan Thomas Bequest Fund 1927, Art Gallery of South Australia, Adelaide.

JANE SUTHERLAND (1855–1928) CHILDREN PLAYING IN A Paddock, 1895

Australian landscape painter Jane Sutherland, born in New York in 1853, arrived in Australia in 1864 and moved to Melbourne in 1870 to study at the National Gallery School. Sutherland was encouraged by her family to pursue her career as an artist and was a pioneer of *en plein air* painting, breaking away from the tradition of nineteenth century studio work. She was a member of the Heidelberg School and the Field Naturalists Club alongside artists Jane Price, Clara Southern and May Vale. The Naturalists explored natural history by venturing into the Australian bush capturing the atmospheric effects of changing light by painting directly from nature. Sutherland joined artists such as Tom Roberts and Frederick McCubbin on some of the first *en plein air* sketching trips. Despite the changing status of women during the 1880s and 1890s, which included their right to vote and property ownership, female artists

were not permitted to stay with men alone at campsites overnight. However, Sutherland, Southern and Vale made day trips to these campsites to capture the spirit and atmosphere of the Australian landscape *en plein air*.

Toward the end of the nineteenth century artists began depicting the changing landscape of Australia. City and urban centres rapidly expanded, and depictions of heroic scenes, bushrangers and pioneers were also common in shaping a national identity. However, the Naturalists remained fascinated with the unspoilt Australian landscape. Sutherland observed children interacting with nature and captured their adventures in such paintings as *Children playing in the field*, 1895. Its sketched and rapid brushwork and overall impression of Australian light capture this rural scene uncontaminated by city life.

AUSTRALIAN IMPRESSIONISTS

RESPONDING

What is your favourite thing about a natural environment you visit often?

Imagine you are going camping in the Australian bush. Brainstorm with your class some things you would need to take with you. What potential hazards would you need to consider to keep you safe? Imagine artists camping in the bush in the nineteenth century. What challenges do you think they faced? What things have changed and what things remain the same about camping today versus in the nineteenth century?

What defines a real Australian landscape? What does the Australian landscape look like where you live?

What colours are reoccurring in Australian Impressionist paintings? Visit your local hardware store and select your top five colour swatches which are common in your favourite Australian Impressionist painting. As a class compare everyone's collection of colour swatches and display on one wall. Collectively, is the selection indicative of the Australian landscape?

Sutherland captured women and children interacting with nature and over 100 years on, artists still remain fascinated by our natural environment and people living and interacting with it. Compare the work of Sutherland to that of contemporary photographer Tamara Dean. What is the difference between realism and naturalism? Write a response to the following: 'Despite an interest in abstract art in the twentieth century, today Naturalists endure'. Use Jane Sutherland, Tamara Dean, and other contemporary artists to support your argument.

Visit your local national park. Observe your surroundings, subject matter, light, atmosphere and how people are interacting with the environment. Write a description that captures the mood and spirit of your observations.

Examine Australian and European *en plein air* paintings. What is similar and different about the two approaches? Write a letter to John Constable who pioneered *en plein air* painting in Britain in 1813 and describe the Australian Impressionists' approach to *en plein air* painting.

Imagine someone is visiting Australia for the first time. Brainstorm what their first impressions might be. How does this differ to what the Australian Impressionists captured in their paintings? What has changed? What remains the same? Using an Australian Impressionist painting write a tourist advertisement for a travel magazine.

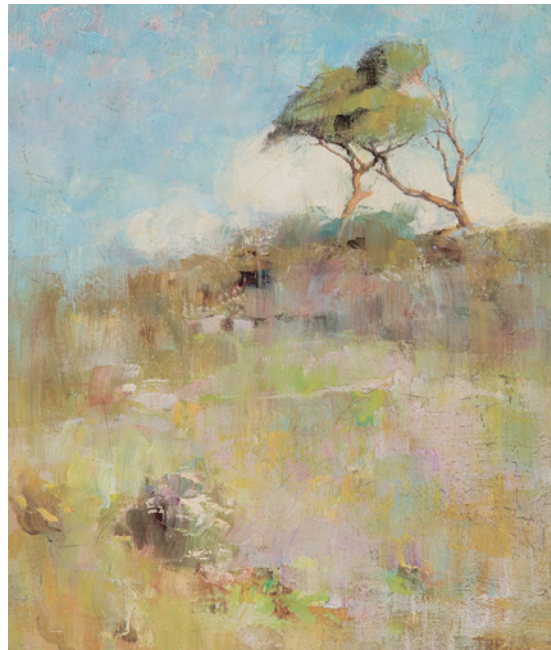
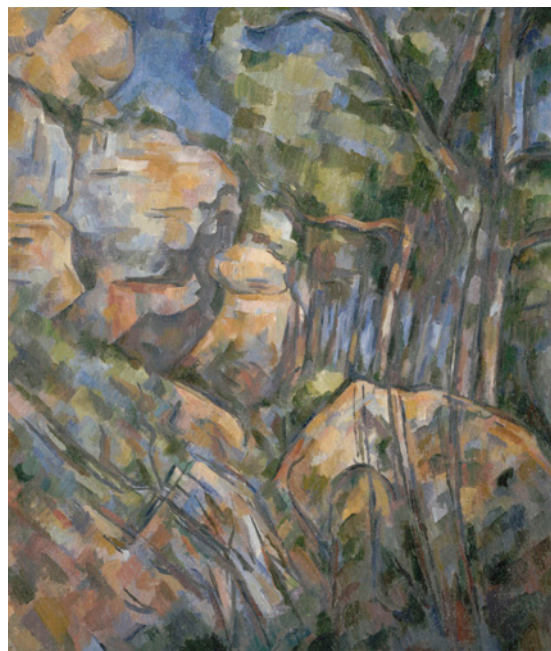


image detail: Jane Price, Australia, 1860–1948, *Spring clouds*, c.1905, Melbourne, oil on canvas, 30.0 x 24.7 cm; Gift of Ann Croser, Elizabeth Finnegan, Penelope Hackett Jones, Justice Kemerli Murray AO and John von Doussa through the Art Gallery of South Australia Foundation Collectors Club 2005, Art Gallery of South Australia, Adelaide



Paul Cézanne, France, 1839–1906, *Rochers près des grottes au-dessus de Château Noir* (Rocks near the caves above Château Noir), c. 1904, oil on canvas, 90.7 x 79.2 cm; Accepted in lieu of inheritance tax, 1978, Musée d'Orsay, Paris, France, photo: © RMN-Grand Palais (Musée d'Orsay)/Gérard Blot.

Compare *Spring Clouds* by Jane Price, *Saplings* by Tom Roberts, *Sherbrooke Forest* by Fred Williams and *Rocks near the caves above Château Noir* by Paul Cézanne. What characteristics do these three paintings have in common? What do you notice about the horizon line in these paintings?

AUSTRALIAN IMPRESSIONISTS



Imagine you have written a publication on Australia. Select an Impressionist work of art to place on the front cover that summarises Australia in one image. Justify your selection in a small paragraph to appear at the beginning of the book.

Compare Australian *en plein air* painting to other depictions of the Australian landscape. Investigate work from the colonial era as well as modern and contemporary works by artists such as Dorrit Black, Grace Cossington-Smith, John Olsen, Margaret Preston and Fred Williams. Select two works of art and conduct a class debate on the topic: 'The Australian Impressionists remain the most successful artists to capture the unique spirit of the Australian landscape'. As a class, first brainstorm the varied environments found in Australia.

TIP: Look at paintings by Nicholas Chevalier, John Glover and Eugène von Guérard.

Writer and curator Timothy Morrell stated "Silver and grey is a national painting in the same way that large scale heroic works of Australian Impressionism such as *A break away!* 1891 by Tom Roberts are national paintings". As a class brainstorm what a 'national painting' looks like and how this may change over time. Do you agree with Morrell's statement? What would an iconic Australian image or national painting look like today?

In 1889 leading Melbourne art critic James Smith wrote "Impressionism is a craze of such ephemeral characteristics to be unworthy of serious attention"

(Daily Telegraph, 24 August 1889). Write a letter to James Smith outlining the success of Impressionism and the impact this movement had on art in the years that followed. Provide an example of one modern and one contemporary artist whose work has been influenced by Impressionism.

MAKING

Create a sunrise or twilight landscape capturing the area where you live. Perhaps select an area that is about to undergo transformation. Focus on the entire view rather than smaller details. Finish the painting in one sitting using broad brushstrokes to capture the changing atmospheric conditions.

The Naturalists were interested in capturing the mood of the landscape during different seasons. Observe the seasonal changes that occur to a landscape near where you live. Create a triptych that captures the same landscape during different seasons.

Early painters during the colonial era were influenced by eighteenth century European landscape painting. While they captured the open space and arid conditions, the Australian light was very different to the European light they were used to painting. The colours and textures of the Australian landscape were a challenge to capture. Create a colour palette for your impression of an Australian landscape today by mixing primary, secondary and tertiary colours. Document your experiments.

image detail: Frederick McCubbin, Australia, 1855–1917, *Setting sun*, c.1911, Melbourne, oil on wood panel, 23.6 x 33.4 cm; M.J.M. Carter AO Collection 2006, Art Gallery of South Australia, Adelaide

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<http://ab.co/2DJCteJ>

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<http://bit.ly/2GSfely>

Artsy – A Brief History of Color in Art
<http://bit.ly/1WdegV6>

Artsy – What art history tells us about Ultra Violet, Pantone's Color of the year
<http://bit.ly/2B0lhEu>

Artsy – How Monet and the Impressionist pave the way for Modern artists
<http://bit.ly/2BkaiVW>

Artsy – Inside the Library that holds the world's rarest colors
<http://bit.ly/2Gilmkq>

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<http://bit.ly/2zPunzV>

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<http://bit.ly/1zSZfw4>

Conversations from the past: Pigments and palettes from the past science of Indigenous art
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Colour Wheels Charts and Tables
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RESOURCES (CONTINUED)

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Cosmos: The Science of everything, The incredible – and bizarre – spectrum of animal colour vision

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Exploratorium – Science snacks – pigments

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National Gallery of Victoria – Australian Impressionism

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National History Museum: How do other animals see the world

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Colour White Light, Reflection and Absorption

<http://bit.ly/2p6i3Hx>

Edmund Scientific: Understanding Absorption of Light - Why do we see different colors?

<http://bit.ly/2HsccUp>

Institute of physics: Light Fantastic – the science of colour

<http://bit.ly/2DltQ9Y>

Refraction of Light Experiment:

<http://bit.ly/2GSfdy0>

TED-Ed: History's deadliest colors – J. V. Maranto

<http://bit.ly/2DkPNpt>

TED-Ed: how we see colour

<http://bit.ly/1AHRdCY>

TED-Ed: What is colour?

<http://bit.ly/2wxTEzM>

Vasaricolors

<http://bit.ly/2lj7mdq>

Why is blue so rare in nature?

<http://bit.ly/2rqXcmx>

Why don't country flag use the colour purple?

<http://bit.ly/2nWq017>

What is colour?

<http://bit.ly/2lIkjnt>

The Gallery's Learning programs are supported by the Department for Education and Child Development.

A SELECTED HISTORY: SCIENCE, COLOUR, ART by Alexandra Morrison

Science

Colour

Art

1666 In England, physicist Isaac Newton (1643–1727) begins experiments that use a prism to separate white light into a seven-part spectrum: red, orange, yellow, green, blue, indigo and violet. He details his findings in his treatise on colour and light, *Opticks* (fig. 1).

1673 In France, painter Roger de Piles (1635–1709) pens *Dialogue sur le coloris* (Dialogue upon colouring), a fictional debate that outlines the role of colour in painting. He argues that a painter must know how colour appears in the real world, and how to then render it on a canvas using pigment.

1704 In Berlin, colour-maker Johann Jacob Diesbach (1666–1743) creates the first synthetic pigment, Prussian blue. It is simple to manufacture, amenable to dyeing and easily transformed into a workable oil.

1708 De Piles publishes *Cours de peinture par principes* (The principles of painting), which distinguishes between *dessin* (drawing) and *coloris* (the use of colour) as two separate skill sets to be studied and developed by a painter. The *Cours* also includes a chart (fig. 2) that grades famous painters' skills in both aspects. Significantly, according to de Piles, no great artist had yet excelled as both draughtsman and colourist: Peter Paul Rubens's (1577–1640) colour outshone his line, for example, whereas Raphael's (1483–1520) exceptional drawing outranked his palette.

1725 German-born painter Jacob Christoph Le Blon (1667–1741) publishes *Coloritto* (Harmony of colouring in painting), which asserts that all painting stems from the three primary colours, their immediate combinations and the harmonies produced by pairing various hues. The text, published in English and French, also draws from Newton's *Opticks*.

1743 French naturalist George-Louis Leclerc (1707–1788), Count of Buffon, presents a study to the French Académie royale des sciences (Royal Academy of Sciences) entitled *Sur les couleurs accidentelles et sur les ombres colorées* (On accidental colours and coloured shadows). He discovers that looking at certain shapes and colours over a sustained period can cause the eye to see an illusory image, now called an afterimage. He also notes that shadows cast by the sun during sunrise or sunset appear blue at times.

1775 In Sweden, chemist Carl Wilhelm Scheele (1742–1786) invents a pigment that becomes known as Scheele's green, a compound including copper and arsenic. Despite its toxicity, the vivid colour is used widely until the early nineteenth century.

1780 Another Swedish chemist, Sven Rinmann (1720–1792), discovers a new compound known as cobalt green. This pigment, called Rinmann's green, becomes available in the 1830s.

1794 In England, physicist Sir Benjamin Thompson, Count Rumford (1753–1814), discovers that an object can produce complementary coloured shadows when lit by two different light sources.

1797 In France, chemist Louis-Nicolas Vauquelin (1763–1829) (fig. 3) discovers chromium. Over the course of the next two decades, his research is adapted for manufacturing colour, and chrome-based yellow, orange and red pigments appear on the market.

1802 French chemist Louis-Jacques Thénard (1777–1857) discovers cobalt aluminate, known as cobalt or Dresden blue. A pure blue, the colour becomes a popular albeit expensive pigment in the decades that follow.

French chemist Jean-Henri Hassenfratz (1755–1827) writes *Le premier mémoire sur les ombres colorées* (A first theory on coloured shadows), which recreates Rumford's project. Apparently unaware of his English predecessor's work, Hassenfratz calls the shadows' differing colours 'complements'.

1809 Lemon yellow or ultramarine yellow, a chromium-and-barium-based yellow pigment, is invented.

1810 German writer Johann Wolfgang von Goethe (1749–1832) publishes *Zur Farbenlehre* (Theory of colours), which expands upon Newton's findings and seeks to understand how individual perception also impacts on the appearance of colour.

1814 In Schweinfurt, Germany, copper acetoarsenite is first synthesised. The bright green, known as Schweinfurt green, emerald green, *vert de Véronèse* or *vert de Vienne*, offers a substitute to Scheele's toxic hue. This new compound is easy to manufacture and widely available in France by the 1830s.

1817 Cadmium yellow, an alternative to chrome yellow, is invented. By the 1840s, the stable pigment is widely available.

1826 French chemist and colour manufacturer Jean-Baptiste Guimet (1795–1871) creates synthetic ultramarine, a hue that had hitherto relied on the expensive natural source, lapis lazuli.

1827 At the Salon, Camille Corot makes his debut while Eugene Delacroix exhibits *La mort de Sardanapale* (*The death of Sardanapalus*) (fig. 4).

1828 The Barbizon School emerges. This group of landscape painters, as well as artists like Corot and Charles-François Daubigny, work in the forests of Barbizon, south of Paris near Fontainebleau. They seek to work directly from nature.

1830 French artist Jean-François-Léonor Mérimée (1757–1836) publishes *De la peinture à l'huile* (On oil painting) (fig. 5). It details various methods of using different source materials, producing pigments, deploying colours and restoring paintings, and influences many painters, including Delacroix.

1839 French chemist Michel-Eugène Chevreul (1786–1889), Director of Dyeing at the Manufacture des Gobelins (Gobelins Factory), publishes *De la loi de contraste simultané des couleurs, et de l'assortiment des objets colorés* (On the simultaneous contrast of colours). Based on experiments started in 1828, his treatise demonstrates that juxtaposing complementary colours (like blue and orange) renders both hues more vivid to the eye (fig. 6).

1840 French chemist E.C. Leclaire successfully produces zinc yellow, a more stable alternative to chromium-based hues.

1841 A collapsible metal paint tube is invented by American painter John Rand (1801–1873) in London. The creation of easy-to-transport, mass-producible and airtight containers for pigment greatly facilitates the availability and reliability of manufactured paint.

1850 Édouard Manet joins the studio of Thomas Couture (1815–1879), where he remains for six years.

Chemists Leclaire and M.G. Barruel obtain an American patent for their production of zinc oxide, used to create white and yellow pigments. In the years that follow, zinc white becomes as inexpensive as the standard lead white.

1852 German physicist Hermann von Helmholtz (1821–1894) publishes *Über die Theorie der zusammengesetzten Farben* (A theory of composite colours). The *Theorie* makes an important distinction between additive mixing, which combines coloured light to form white light, and subtractive mixing, which combines coloured pigments to produce dark grey or black.

In Aix-en-Provence, Paul Cézanne befriends his classmate Émile Zola (1840–1902).

1855 In a pavilion at the *Exposition Universelle* (World Fair), Gustave Courbet sets a new precedent – an independent exhibition.

Camille Pissarro arrives in Paris.

1856 Scottish chemist William Henry Perkin (1838–1907) accidentally discovers mauveine, a synthetic by-product of coal tar. It is quickly adapted for use and production, first as a dye and later, a pigment known as mauve.

Polish chemist Jakob Natanson (1832–1884) invents a new organic dye, a vibrant purple-red hue known as magenta.

In Le Havre, Claude Monet meets Eugène Boudin, beginning a long friendship. Under Boudin's guidance, Monet begins to paint *en plein air*.

1859 Chemist Charles-Ernest Guignet (1829–1906) patents a green oxide pigment in France. Known as viridian green or *vert émeraude*, his hue drew from Vauquelin's work.

Chemist Alphonse Salvétat (1820–1882) invents cobalt violet, a brilliant but expensive pigment.

Newly arrived in Paris from Le Havre, Monet meets Pissarro at the Académie Suisse, an independent studio.

At the Salon, Corot's student Stanislas Lépine shows for the first time. James Tissot, also recently arrived in Paris, makes a significant debut with five entries, while Pissarro and Boudin also see their work accepted for the first time.

1860 Although discovered at the end of the eighteenth century, cobalt stannate, known colloquially as cerulean blue, is first marketed in England as a pigment for watercolour.

Julien Tanguy (1825–1894) (fig. 7), a native of Brittany, moves to Paris. Affectionately known as Père or Father Tanguy, he becomes a favourite colour merchant among the Impressionists, sells paint tubes in transportable boxes and often accepts paintings from artists in exchange for more pigments. He travels to Barbizon and Argenteuil to sell his wares but ultimately settles in Paris at 14 rue Clauzel.

Johan Barthold Jongkind arrives in Paris from Rotterdam.

1861 Recently arrived in Paris from Aix-en-Provence, Cézanne also meets Pissarro and Armand Guillaumin (1841–1927) at the Académie Suisse.

Having already apprenticed in the art of painting porcelain and fans, Auguste Renoir joins the studio of Charles Gleyre (1806–1874). He then enrolls in the École des Beaux-Arts (School of Fine Arts) later this year or the following.

Manet debuts at the Salon. He also meets Charles Baudelaire (1821–1867) and Edmond Duranty (1833–1880).

Berthe Morisot meets Corot. Together in Ville d'Avray, they paint landscapes outdoors and form a fast friendship.

Courbet paints a portrait of Alfred Stevens while travelling through Belgium. At the end of the year, he opens a studio and Henri Fantin-Latour becomes one of his first students.

1862 Another alternative green pigment appears and is marketed to painters: chromium green.

Back in France following two years of military service, Monet meets Jongkind in Le Havre.

Renoir paints *en plein air* in the forests of Fontainebleau for the first time.

Cézanne settles in Paris. He continues to work at the Académie Suisse and befriends Antoine Guillemet and Guillaumin.

Alfred Sisley returns to his native Paris from London and joins the École des Beaux-Arts and Gleyre's studio. The studio now counts Renoir and Frédéric Bazille (1841–1870) among its students.

1863 The Salon jury judges hopeful participants with exceptional severity. As a conciliatory gesture towards the hundreds of artists whose works are rejected, Napoleon III (1808–1873) approves the organisation of the Salon des Refusés (Salon of the Rejected). The exhibition opens in mid-May and includes paintings by Manet, Pissarro, Jongkind and Fantin-Latour.

Renoir and Cézanne meet.

Monet joins Gleyre's studio but does not find the environment edifying. He befriends Renoir, Sisley and Bazille before definitively leaving the studio.

1864 Chevreul publishes *Des couleurs et de leurs applications aux arts industriels* (The principles of harmony and contrast of colours: and their applications to the arts) (fig. 8), which adapts his earlier findings for more practical applications.

Renoir, Morisot and her sister, Edma (1839–1921), present at the Salon for the first time.

Monet meets Courbet.

1865 At the official Salon, Manet exhibits *Olympia* and Monet participates for the first time.

1866 German physician and physiologist Ernst Brücke (1819–1892) publishes *Die Physiologie der Farben für die Zwecke der Kunstgewerbe* (The physiology of colours for the purposes of art-making), which is immediately translated into French and nuances Helmholtz's theories of additive and subtractive mixing. It also includes observations on colour effects produced by variable sunlight and reiterates Buffon's earlier observations on blue shadows.

Cézanne and Manet meet.

Manet and Zola meet (fig. 9).

At the Salon, Sisley makes his debut.

1867 Academician and former director of the Beaux-Arts Charles Blanc (1813–1882) publishes *Grammaire des arts du dessin* (The grammar of painting and engraving), which distinguishes drawing as the medium that expresses thought or feeling, and colour as a mere prerequisite of this expression.

Jean-Auguste-Dominique Ingres (1780–1867) dies in January. A retrospective is held at the École des Beaux-Arts in April.

At the *Exposition Universelle* (fig. 10), Manet and Courbet both organise solo exhibitions. Manet uses Zola's essay 'A new manner of painting', published earlier in the year, as the brochure for his show.

Some painters rejected from the Salon (Bazille, Cézanne, Monet, Pissarro, Sisley and Renoir) request another Salon des Refusés to be organised.

Thanks to an introduction by Fantin-Latour in the Louvre, Manet and Morisot meet.

1869 Monet meets Manet and begins to frequent the Café Guerbois; there he meets Fantin-Latour, Cézanne and Edgar Degas (1834–1917).

In October, Renoir and Monet paint directly from nature at La Grenouillère, a leisure spot near Paris.

1870 The Franco-Prussian War begins in July. Manet, Stevens, Degas, Cézanne and Pissarro remain in France; Monet and his new wife Camille leave for London; Pissarro also travels to England. Bazille, an ardent friend and supporter of his fellow painters, dies on the battlefield in Beaune-la-Rolande.

1871 In England, Daubigny introduces Monet to the art dealer Paul Durand-Ruel (1831–1922) (fig. 11).

1873 Courbet leaves France for good and settles into a self-imposed exile in Switzerland.

1874 From 15 April to 15 May, the first Impressionist exhibition is held at 35 boulevard des Capucines in the studio of the photographer Nadar (fig. 12). Thirty participants – including Boudin, Cézanne, Monet, Morisot, Pissarro, Renoir and Sisley – exhibit as a Société anonyme des artistes, peintres, sculpteurs et graveurs (Anonymous society of artists, painters, sculptors and engravers) and show 165 works to mixed reviews. Critic Louis Leroy (1812–1885) forges the pejorative name 'Impressionist' after the painting that Monet presents at this exhibition: *Impression, soleil levant* (*Impression, sunrise*).

1875 In March, at the auction house Hôtel Drouot, Monet, Morisot, Renoir and Sisley organise an auction of seventy-three paintings, which attracts rowdy crowds but low prices.

1876 In April and May, the second Impressionist exhibition is held in Durand-Ruel's gallery at 11 rue le Peletier. Fewer than half of the original participants return. Gustave Caillebotte joins the group; Cézanne does not exhibit.

Monet begins to paint at the train station Saint-Lazare.

1877 In April, the third Impressionist exhibition takes place at 6 rue le Peletier, across the street from Durand-Ruel. The participants call themselves the 'Impressionists'. Cézanne rejoins the group but Jean-Francois Millet (1814–1875) does not exhibit. Pissarro, in defiance of Durand-Ruel's advice, chooses to display his paintings in white frames to better preserve the relationships between colours in his works.

Courbet dies in Switzerland.

1878 Brücke publishes the *Principes scientifiques des Beaux-Arts* (Scientific principles for the fine arts) in France, which advises artists to implement colour theories into their working practices.

Influential critic Théodore Duret (1838–1927) pens his defence of the artists with *Les peintres impressionnistes* (The Impressionist painters) (fig. 13). He links their formal

methods of loose brushwork to their Romantic predecessors, Japonism and *plein air* painting.

1879 American-born physicist Ogden Rood (1831–1902) publishes *Modern chromatics* (fig. 14), which takes up Helmholtz's colour theories. He suggests that hues that seem inconsequential up close may have a greater impact when viewed from a distance, and also appear richer than large swathes of colour. Pissarro singles out Rood's work as a painterly challenge, while Georges Seurat and Paul Signac also explore his ideas.

In May, the fourth Impressionist exhibition opens at 28 avenue de l'Opéra. Paul Gauguin presents his work, while Morisot, Renoir and Sisley do not exhibit.

1880 In April, the fifth Impressionist exhibition is held at 10 rue des Pyramides. Morisot rejoins the circle to present her work, but Monet, Renoir and Sisley do not exhibit.

1881 The annual Salon is no longer supported by the French state. A group of artists called the Société des artistes français (Society of French Artists) emerges in its stead.

The sixth Impressionist exhibition returns to its erstwhile location at 35 boulevard des Capucines; this time, only thirteen artists are represented. Pissarro exhibits paintings in coloured frames complementary to the dominant colour of the works.

1882 Cézanne and Renoir paint side by side in L'Estaque.

In March, the seventh Impressionist exhibition opens at 251 rue Saint-Honoré, organised by Durand-Ruel. Only nine artists present this year, including Caillebotte, Gauguin, Morisot, Pissarro, Renoir and Sisley.

1883 Monet moves to Giverny.

Durand-Ruel organises solo exhibitions to feature the works of Monet, Pissarro, Renoir and Sisley.

Manet dies.

1884 In January, a retrospective to honour Manet is organised by a group of staunch supporters, including Zola, Duret, Albert Wolff (1835–1891) and Antonin Proust (1832–1905).

In Brussels, a group of painters dub themselves Les Vingt (The Twenty, sometimes also known as Les XX) and hold an exhibition at the Salon des XX in February. Théo van Rysselberghe participates.

Seurat begins preliminary sketches for *Un Dimanche à la Grande-Jatte* (*A Sunday on La Grande Jatte*) and *Une baignade à Asnières* (*Bathers at Asnières*).

Signac purchases a landscape by Cézanne from the colour merchant Tanguy.

Signac meets Seurat, as well as the chemist Chevreul (fig. 15).

The first Salon des artistes indépendants (Salon of Independent artists) is held, featuring the works of Seurat, Signac and Henri-Edmond Cross, among others.

1885 Mathematician and physiologist Charles Henry (1859–1926) publishes *Introduction à une esthétique scientifique* (Introduction to a scientific aesthetics), which proposes formulae for colour harmonies.

Signac meets Pissarro and his son, Lucien. Signac introduces Pissarro to Seurat.

1886 Critic Félix Fénéon (1861–1944) coins the term 'Neo-Impressionist' when discussing the works of Pissarro, Seurat and Signac in an exhibition review (fig. 16).

The eighth (and final) Impressionist exhibition takes place at 1 rue Lafitte. The seventeen participants include only a few of the artists firmly associated with the group: Mary Cassatt (1844–1926), Degas, Morisot and Pissarro are present, while Monet, Renoir and Sisley are absent. Seurat and Signac exhibit at Pissarro's invitation, and the former presents *La Grande Jatte*.

Cézanne and Zola fall out over the publication of the latter's novel *L'œuvre* (The masterpiece), whose protagonist is a failed artist and undeniably modelled after the painter from Aix.

1888 Signac exhibits at the Salon des XX in Brussels, alongside Van Rysselberghe and others.

1889 Monet spearheads efforts to purchase Manet's *Olympia*. With the support of many of the late artist's allies, the gift of *Olympia* is accepted by the French state the following year.

1890 Monet begins to paint his first series, *Meules* (*Haystacks*), which he exhibits at Durand-Ruel the following spring.

1891 Painter Jehan-Georges Vibert (1840–1902) publishes *La science de la peinture* (The science of painting), a manual intended to teach painters how to use stable, reliable materials to guarantee the work of art's condition and appearance with time.

Monet undertakes a second series, *Peupliers* (*Poplars*).

Seurat dies.

1892 Dealer Ambroise Vollard (1866–1939) (fig. 17) discovers Cézanne's work in Tanguy's shop.

Monet begins to paint a series of works after the Rouen Cathedral.

1893 After Delacroix's death, his *Journal* is published for the first time. Part-diary, part-theoretical manifesto, the journal is read by Monet and other painters of the early twentieth century such as Henri Matisse (1869–1954).

1894 Caillebotte dies and leaves his collection of Impressionist works to France, stipulating that they must remain on view in Paris. Renoir acts as executor of his estate and ensures that the French state accepts forty works under these conditions.

1895 In May, Monet exhibits twenty canvases depicting the Rouen Cathedral at Durand-Ruel.

1898 Van Rysselberghe arrives in Paris.

1899 Signac publishes 'D'Eugène Delacroix au néo-impressionnisme' (From Eugène Delacroix to Neo-Impressionism), which presents the works of his peers as the scientific extension of a nineteenth-century project beginning with the Romantic painter and evolving with the Impressionists' practice. It reprises ideas he first published in *La Revue blanche* the year before.

Monet begins painting water lilies, working primarily at his home in Giverny.

1906 Upon Cézanne's death, a retrospective of his work is organised at the Salon d'Automne (Autumn Salon) the following year to honour him.

1909 At Durand-Ruel, Monet exhibits nearly fifty canvases of water lilies.

1910 At the Grafton Galleries in London, English painter and critic Roger Fry (1866–1934) organises the exhibition *Manet and the Post-Impressionists* (fig. 18) and invents the term 'Post-Impressionism'. He introduces the work of these painters anew to the English public.

1918 In Giverny, Monet begins to work on a large-scale 'decorative' project featuring water lilies (*Nymphéas*) (fig. 19).

1926 Fry contributes to the magazine *L'Amour de l'art*, publishing a series of articles about Cézanne. He identifies the artist's mastery of colour as his greatest gift and for this reason, pronounces the painter a genius without peer.

1927 Fry publishes *Cézanne, a study of his development*.

Monet's *Water lilies* arrive at the Musée de l'Orangerie.

1929 The Museum of Modern Art in New York inaugurates its opening with the exhibition *Van Gogh, Cézanne, Gauguin, Seurat*. Its director Alfred Barr (1902–1981) traces these painters' colourful origins – and all modern art that follows – to Impressionism.

1937 Art historian Pierre Francastel (1900–1970) links the methods of the Impressionists to early nineteenth-century scientific colour theories.

1950 Abstract Expressionism partisan Clement Greenberg (1909–1994) writes the first of a series of essays on Impressionist painters.