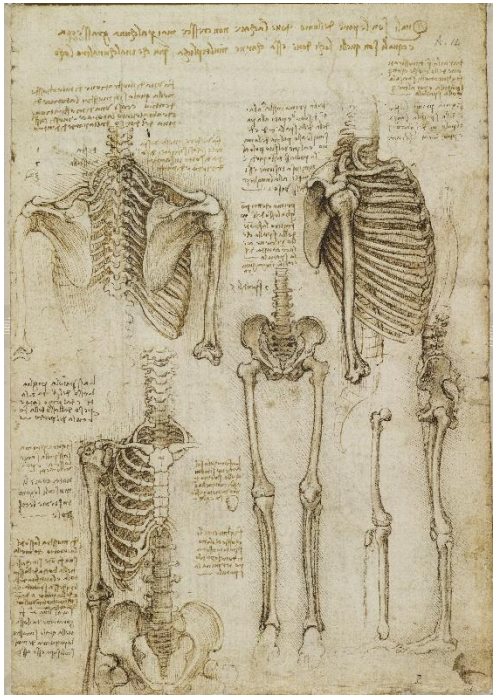
Leonardo da Vinci: A life in Drawing

1 February–6 May 2019

Information for teachers and group leaders

This resource will support self-guided visits to the Leonardo da Vinci A Life in Drawing exhibition at National Museum Cardiff.



Leonardo da Vinci, *The skeleton*, c.1510-11 RCIN 919012r, Royal Collection Trust/© Her Majesty Queen Elizabeth II 2018

Leonardo da Vinci: A life in drawing

To mark the 500th anniversary of Leonardo da Vinci's death, we will be displaying twelve of his greatest drawings as part of #Leonardo500 – a national celebration of this extraordinary artist. The drawings are from the Royal Collection Trust which contains the world's finest collection of Leonardo's works.

In February 2019, a total of 144 of Leonardo's exquisite drawings will be on show in 12 simultaneous exhibitions across the UK, including National Museum Cardiff.

These exhibitions will be followed by major displays at The Queen's Galleries in Buckingham Palace and the Palace of Holyrood House in Edinburgh.

The works have been selected to show the extraordinary scope of the artist's interests – painting, sculpture, architecture, music, anatomy, engineering, cartography, geology and botany - as well as his use of different media – pen and ink, red and black chalks, watercolour and metal point.

Further information about this exhibition can be found here, including more detail on each of the individual drawings:

https://www.rct.uk/collection/themes/exhibitions/leonardo-da-vinci-a-life-in-drawing/national-museum-of-wales-cardiff

ART OR SCIENCE?

Alongside the Leonardo exhibition we are also exhibiting a selection of works from Amgueddfa Cymru's Art and Natural History collections, as well as loans from Special Collections and Archives, Cardiff University. This display examines the cross-over between art and science.

Artists have long studied the physical make-up of living subjects, hoping to portray them more realistically and expressively. Some artists have become renowned scientists in their own right.

Many different artistic techniques have also been employed by scientists in an effort to explore the complex three-dimensional forms of nature.

Among those works on display will be rarely seen drawings by Rembrandt & Augustus John; a sculpture by Degas, Botanical wax models and taxidermy.

TICKETS

Entrance to the exhibition is via ticket only. Groups must book a visit beforehand.

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When you arrive at the Museum, you must first book in at the reception desk, and then collect your tickets from the shop.

You must have a ticket to present to the Museum Assistant in the gallery.

£5 for adults / £4 for concessions / 16 and under are free.

Groups 16 years and under FREE.

Teachers and group leaders accompanying a group are free.

Visits are 1 hour maximum. Please arrive 5 minutes before your timeslot.

Learning Office – for bookings and general enquiries

Tel: (029) 2057 3240

learning@museumwales.ac.uk / addysg@museumwales.ac.uk

Location

The exhibition is located in Gallery 9, within the Historic Art and Landscape Collections. Information for schools visiting our permanent galleries can be found here:

https://museum.wales/media/28924/art-learning-resource-english.pdf

How do I plan a successful visit to the art galleries?

- Visit the galleries on your own before the visit.
- Divide your pupils into smaller groups.
- Provide opportunities for pupils to work on focused activities in front of individual art works.
- Ensure a good range of activities that involve looking, talking and making.

Use visual thinking strategies to help the group to discuss the work and respond to questions.

Choose one drawing to look at closely:

What did you see first of all when you looked at this work?

What made you notice that?

What do you think was Leonardo's reason for making this work? What did he want to say?

Start with a question – what do the students want to know. What makes a good question? How can we answer this together?

Use strategies to encourage discussion:

30 seconds to look, and then describe the work from memory.

One person describes and the other draws what they are describing.

Choose a single word to describe the work. Explain why.

Discuss the title of the piece. What do titles tell you? Is a title useful for exploring the work?

Leonardo da Vinci, *Studies of an infant*, c.1504-8 RCIN 912562, Royal Collection Trust/© Her Majesty Queen Elizabeth II 2018

Gallery Information

Leonardo da Vinci: A Life in Drawing

The year 2019 marks the five hundredth anniversary of the death of Leonardo da Vinci, one of the greatest artists and scientists the world has known.

Drawing lay at the heart of Leonardo's work. He used drawing to prepare his artistic projects, to record the world around him, and to pursue his scientific ideas.

The Royal Collection holds the finest surviving group of Leonardo's drawings – more than 550 sheets that have been together since his death. As paper is damaged by light, these drawings cannot be on permanent display. To mark Leonardo's anniversary, Royal Collection Trust is collaborating with twelve museums and galleries to stage simultaneous exhibitions of his drawings across the United Kingdom. In the summer of 2019 all these drawings will be brought together in a single exhibition at The Queen's Gallery in London, followed by a selection of these works at The Queen's Gallery in Edinburgh in the winter of 2019-20.

Leonardo's life

Leonardo was born near the town of Vinci in central Italy on 15 April 1452. He was working as a painter in nearby Florence by the age of 20.

Around 1482, Leonardo moved to Milan, where he began to study the scientific subjects that would be of use to an artist – human anatomy, the nature of light and colour, and so on. Leonardo painted the *Last Supper*, his greatest surviving work, for Ludovico Sforza, the ruler of Milan. He also spent ten years working on a huge equestrian monument, only for the project to be abandoned.

In 1499 Sforza was overthrown and Leonardo returned to Florence, where he worked on paintings including the *Mona Lisa* and the *Battle of Anghiari*. In 1506 he moved back to Milan, where he carried out his greatest scientific investigations, though he would never publish any of his research. Leonardo died at Amboise, France, on 2 May 1519, at the age of 67.

Leonardo's drawing materials

All of Leonardo's drawings are on paper made from pulped clothing rags. Paper was expensive so he used it sparingly and preserved his drawings carefully.

Throughout his life Leonardo drew and wrote in pen and ink. The pen was cut from a goose's wing feather, and the 'iron gall' ink obtained from mixing iron salts with crushed oak-apples (galls).

Early in his career Leonardo also drew in metalpoint – a metal stylus, usually of silver - on paper coated with a preparation of ground bone and pigment. In the 1490s Leonardo abandoned this fine and demanding technique in favour of natural red and black chalks, to

obtain a wider tonal range. He also used dilute washes applied with a brush to add shading, and occasionally watercolour for his maps.

Leonardo's drawings in the Royal Collection

At his death in 1519, Leonardo bequeathed his drawings and notebooks to his pupil Francesco Melzi, who arranged the drawings by subject matter and annotated them with numbers, as seen on several of the sheets here.

Around 1580, the sculptor Pompeo Leoni acquired Leonardo's drawings from Melzi's son, and mounted them on the pages of at least two large albums. One of those albums was in England by 1630, in the collection of the Earl of Arundel. Within fifty years the album had been acquired by King Charles II, possibly as a gift from Arundel's grandson.

The drawings were removed from the album during the reign of Queen Victoria and mounted individually, and in the early twentieth century many were stamped in the corner with the cipher of Edward VII. The empty binding of Pompeo Leoni's album was preserved as a relic of the master – the repository for three centuries of much of what we know today about Leonardo.

Drawings on display

Central plinth drawings:

The skeleton, *c*.1510-11

Black chalk, pen and ink, wash

This is Leonardo's most complete representation of a skeleton, seen from front, side and back, in the manner of an architectural drawing. There are some minor errors of detail, such as the exaggerated length of the shoulder blade against the ribcage, but Leonardo's understanding of human structure was unprecedented.

Leonardo was left-handed, and his personal notes are written in mirror-image. *Translations can be viewed on the screen behind you.*

Notice:

The note at the top of the page records Leonardo's intention to determine which parts of the body remain unchanged and which expand the most – the fat distribution of the body. Leonardo's notes are a mixture of his intentions for drawing, his observations and his questions.

The muscles of the face and arm, and the nerves and veins of the hand, *c.*1510-11

Pen and ink with wash, over black chalk

This shows Leonardo's 'patchwork' approach to compiling his sheets, with drawings and notes on a range of subjects added over a period of time.

The two studies of the hand show the paths of the nerves and arteries. The studies of the facial muscles are impressively accurate. Every structure depicted here is identifiable.

Notice:

The drawings of the face are annotated with letters which correspond to particular muscles. h, o and t are the muscles of anger, p is sorrow, and g is for biting.

The cardiovascular system and principal organs of a woman, *c.*1509-10

Black and red chalk, pen and ink, yellow wash, on toned paper, pricked through

This magnificent drawing reveals Leonardo's research into the internal organs. Here he combines his findings from a dissection of an old man with ancient beliefs and animal dissections, in an attempt to depict a woman's internal organs.

Leonardo used a range of illustrative conventions. The vessels overlap each other, the heart is sectioned through, and the whole system is seen within the external outlines of the body.

Notice:

You can see Leonardo's thumbprint located at the bottom of the arm on the left of the drawing.

The cardiovascular system and principal organs of a woman, *c.*1509-10

Pricked through

The dense network of pin-holes match the outline of the body and internal organs seen on the other side. Pricking holes through a drawing had two purposes. By folding the sheet and pricking through both sides, Leonardo could fix the symmetry of the body. He could also use the sheet as a template, dabbing chalk dust through the holes onto a fresh sheet of paper to make a pattern of dots, allowing him to create a new copy of the drawing.

Wall mounted drawings, left wall:

*A horse in left profile, with measurements, c.*1490

Metalpoint on blue-grey prepared paper, the outlines incised, the upper half damaged by damp.

During the 1480s, Leonardo was commissioned to make a bronze equestrian monument to Ludovico Sforza's father, the former duke of Milan. To help him to build the clay model for the monument, Leonardo measured individual horses in detail. You can see his notes for measurements on the drawing, including focused additional sketches.

Notice:

This drawing has previously been folded. The upper half is damaged by damp. You can still see the outlines of some drawings, including writing 'De Lionardo'.

The unit of measurement is the horse's head (Testa). Leonardo has written this as 'T' in his measurements.

From the clay model, Leonardo constructed a mould and built a foundry to create the cast. In 1494, 75 tons of bronze for the monument was requisitioned to make cannons. The project was suspended. 5 years later French forces took Milan. Leonardo's model for the horse was used as target practice by French troops!

A design for an equestrian monument, *c.*1518-19

Black chalk on paper washed buff

While he lived in France, Leonardo made many designs for an equestrian monument, probably for the French king. Here the rider is rather rubbery and doll-like, nude apart from a cascading cloak, and raising his arm to strike a fallen foe..

The hazy black chalk and uncertain sense of scale give the drawing a dream-like atmosphere, in contrast to the precision of Leonardo's earlier drawing for the Sforza monument.

A map of the Arno west of Florence, 1504

Pen and ink, blue and green wash

Leonardo was a respected engineer and mapmaker.

In the summer of 1504 he surveyed stretches of the river Arno to the east and west of Florence, probably as a commission from the city government. Leonardo's resulting maps are coloured with washes and annotated to identify mills, the sizes of sandbanks and so on.

A stem of Job's-tears, *c*.1510-15

Black chalk, pen and ink

Leonardo also drew plants throughout his life, following the tradition of naturalistic detail in fifteenth-century Italian art. His finest botanical drawings were made in connection with a painting of *Leda and the Swan*. What started as studies towards a painting soon became scientific studies in their own right.

This drawing depicts the grain-bearing grass known as Job's-tears (*Coix lachryma-jobi* L.). The plant is native to Asia. This is its first record in western Europe.

Wall mounted drawings, far wall:

A standing male nude, *c*.1504-6

Red chalk

Leonardo's most ambitious painting was the *Battle of Anghiari*, a huge mural of a celebrated Florentine victory over Milan. The painting remained unfinished and was later destroyed.

Leonardo prepared meticulously for the project. He studied male nudes systematically from front, back and side, to allow him to paint them with complete confidence. Here the model balances his weight evenly: Leonardo strikes the perfect balance between subjective beauty and objective study of the underlying structures.

The hatching on the drawing creates light and shadow to reveal the muscles.

Studies of an infant, *c*.1504-8

Charcoal, pen and ink

These may be exploratory studies for the Christ Child or Baptist in one of Leonardo's compositions of the *Madonna and Child with St Anne*. This occupied him for the last two decades of his life. This drawing captures lifelike and spontaneous poses and gestures, with little concern as to how they might be integrated in a multi-figure composition.

Wall mounted drawings, right wall:

*The head of St Bartholomew, c.*1495 or later

Red chalk on red prepared paper

Leonardo's greatest work to reach completion was the *Last Supper*, painted for Ludovico Sforza in the refectory of Santa Maria delle Grazie in Milan.

This carefully finished study of the head of St Bartholomew, at the far left of the painting, may be a definitive drawing for Leonardo to consult while working, or even his 'fair copy' to preserve his invention for future reference.

Notice:

The red chalk on red paper suppresses the tonal range.

Only about 4 – 5 drawings of the last supper survived.

*A caricature of bald fat man, c.*1485-90

Pen and ink

Leonardo had an interest in Grotesque faces throughout his life. Around 1490 he was investigating the principles of ideal human proportion. By deliberately distorting these ideals of beauty, Leonardo could create images of 'ideal ugliness'.

The speed with which this obese man was drawn suggests this may be a sketch of a specific individual, and thus one of Leonardo's few true caricatures.

Notice:

The use of hatching to create shadows and shape on the back of the head.

A masquerader as a lansquenet, *c*.1517-18

Black chalk, pen and ink, wash, on rough paper

In 1516 Leonardo moved to France to take up a position as court artist to Francis I. It is thought that he designed elaborate and exotic costumes for the many entertainments staged for the king. This drawing shows a masquerader in the showy dress of a mercenary soldier or lansquenet.

Although the design of costumes may now seem trivial, Leonardo clearly relished the opportunity to indulge his love of decorative elegance.

A deluge, *c*.1517-18

Black chalk, pen and ink, wash

A cataclysmic storm overwhelming the Earth was one of Leonardo's favourite subjects during the last years of his life.

This is the most carefully finished of Leonardo's deluge drawings, with a mountain fragmenting into crystalline blocks and cascading in arcs onto the drowned landscape below. Far from being chaotic, it is drawn with the eye of a scientist who is fascinated by the forms and optical qualities of clouds, rain, floodwater, debris and dust.

Notice:

Jets of water shooting out from the centre. Square blocks of stone topple and fall. Dark clouds with jets of rain curling down. His drawings of a deluge reveal a fascination with destruction.

The dispassionate inscription in the clouds reveals the dual nature of this drawing – both visionary and theoretical:

"Of rain. You will show the degrees of falling rain at various distances and of varying degrees of obscurity, and let the darkest part be closest to the middle of its thickness".