Crown Jewels

Designed by: Mitchell Kruik

Piece count: 10,476

Built by: Mitchell Kruik

Build hours: 63

Wonders of the Crown Jewels

Date: The oldest piece is over 800 years old, most pieces date to King Charles II's coronation in 1661

Size: Various

Place: United Kingdom

Crown jewels are adornments and regalia worn by royalty at coronations and formal state events. The British Crown Jewels are a powerful symbol of the British monarchy, and hold deep religious and cultural significance to the United Kingdom. The Crown Jewels signify the royal authority to lead and protect the Nation and Commonwealth. The tradition of using the British Crown Jewels for coronations dates back over 1000 years, however the current collection of jewels are much younger. During the English Revolution, the monarchy was abolished. King Charles I was executed, and all but one piece of the Crown Jewels held in Westminster Abbey were destroyed. When Lord Protector Oliver Cromwell died less than a decade later in 1658, so did the English Republic. The monarchy was reinstated with the Coronation of King Charles II in 1661. An entire new set of Crown Jewels was made for his Coronation, and has since been used by generations of British royalty. The jewels are kept under armed guard in the Tower of London, and are regularly used by reigning monarch Queen Elizabeth II for important national ceremonies

Designer and Builder notes

I really do appreciate English culture, and in no better way can I celebrate it, than by making the royal crown, orb and sceptre from the Crown Jewels.

These models are covered in large amounts of the rare colour, pearl gold, which is very hard to obtain and on very few LEGO elements that we could use. So I had to get rather creative with how I used it on small and intricate details. To make it even prettier, the transparent coloured parts make very nice little gems and jewels, that were lavishly used on these accessories for English royal attire. My favourite item is the crown with its regal purple fabric. It glistens in the light, as with any fine golden item. – *Mitch*

Faberge Eggs

Designed by: Clay Mellington

Piece count: 4,512

Built by: Clay Mellington

Build hours: 57

Wonders of Faberge

Date: 1885 - 1917

Size: Various

Place: Russia

Peter Carl Fabergé, a Russian artist-jeweller and goldsmith, earned acclaim as a masterful designer of brilliant precious metal and gem creations in St Petersburg from 1870. Fabergé's fine craftsmanship and creativity quickly gained the attention of the Russian royals; he was appointed as jeweller to the Russian Imperial Court in 1885. That same year, Emperor Alexander III decided to gift his wife, Empress Marie Fedorovna, a golden egg to celebrate Easter, and the twentieth anniversary of their betrothal. This 'Hen egg' became the first of 50 Imperial Eggs created by Fabergé for the royals, before the Russian Revolution ended the Romanov dynasty in 1917. Fabergé let his artistic imagination run wild with each proceeding Imperial Egg; each one becoming more elaborate and decadently expensive, richly layered with cultural references. Fabergé took over one year to create each egg, assigning each a different theme and incorporating hidden treasures inside them. These included a miniature Coronation carriage, a bejewelled clockwork swan, and a heart-shaped frame containing the 11 miniature portraits of members of the royal family. Today, Fabergé Eggs continue to be highly sought after, and are worth millions of dollars.

Designer and Builder notes

Possibly the most well-known decorative eggs ever created, the Faberge Eggs were a great challenging model to work on. Each egg contained a gift inside it and this was where I started the design. I wanted to be able to fit the surprise inside the egg just like the real thing. Starting with these also decided the scale for each egg. Faberge had over 50 eggs made so I couldn't do just one and in the end I chose three eggs to build: the Imperial Coronation Egg (the most well-known of the Faberge collection), the Rosebud Egg (a delicate and pretty cherry-red egg) and the Napoleonic Egg (beautiful deep emerald-green coloured egg). To show some different ways that you can build with LEGO, I decided to make each egg with a different building technique.

For the Yellow Egg, I have used a SNOT technique based on the Lowell Sphere by Brams.

In this, plates and bricks are staggered and arranged in a way that points all of the studs outward, giving a very convincing rounded shape. For the red egg I used hinges, bars and clips to arrange small panels together to form the egg shape. I chose this technique after designing the egg's surprise, the rosebud, to keep the design consistent.

For the green egg, I kept things simple and used a studs-up method. Despite bricks being very square and blocky, I think the egg shape came up quite nicely. The chance to use so many gold elements was very exciting and I don't think I'll ever have this many myself. I hope people can forgive me for not staying 100 per cent true to size with these eggs but if I went any smaller, I wouldn't have been able to achieve the detail that they deserve. – *Clay*

Big Ben

Designed by: Mitchell Kruik

Piece count: 18,437

Built by: Mitchell Kruik

Build hours: 94

Wonders of Big Ben

Date: 1843 - 1859

Size: 96 metres tall. Clock hour hand is 2.7 metres long, minute hand is 4.3 metres long

Place: London, England, UK

Big Ben is iconic to London, standing alongside the Houses of Parliament on the River Thames. Big Ben popularly refers to the tower, clock and bells of UK Parliament, however it was the Great Bell that was first called ‘Big Ben’. The name ‘Big Ben’ is thought to have originated as a namesake for the London commissioner of works, Sir Benjamin Hall, whose name is engraved on the bell. Another theory is that it was named after the popular heavyweight boxer at the time, Benjamin Caunt, as the bell was the biggest of its time. After a fire largely destroyed the Houses of Parliament in 1834, it was decided the rebuilt Palace of Westminster should feature a large clock tower. The clock was designed by Edmund Beckett Denison (who was known as formidable barrister with a rather unusual expertise in horology) in collaboration with Astronomer Royal Sir George Airy and clockmaker Edward Dent. The clock’s main bell was so heavy that it needed 16 horses to pull it through the centre of London for installation in St Stephen’s tower, known as Elizabeth Tower since 2012; renamed in honour of Queen Elizabeth II’s long reign.

Designer and Builder notes

One day I will travel to the great city of London and see its sights, but for now I’ll be content with building its amazing historic architecture, and Elizabeth tower (the true name for the clock tower holding the Big Ben bell) is no exception. I found building a clock tower to minifigure scale quite a considerable challenge, as no suitable printed clock element existed at this size! Happy enough with the use of a large dish, I was able to make four identical rings out of flex tube behind it where I could get the right curvature to put all the numbers on. I added a mix of historical and modern figures into the clock tower and its surroundings, including a very naughty Guy Fawkes fellow, a dancing chimney sweep and a Dalek! Make sure you hang around long enough, as it may be almost time to hear the mighty Big Ben chime! – *Mitch*

Stonehenge

Designed by: Clay Mellington

Piece count: 10,000

Built by: Clay Mellington

Build hours: 64

Wonders of Stonehenge

Date: Built in six distinct stages between 3000 - 1520 BCE

Size: approximately 25 square kilometres

Place: Wiltshire, England, UK

Stonehenge has confounded and intrigued researchers ever since Henry de Huntington and Geoffrey de Monmouth first recorded it as a ‘great wonder of the world’ in the 12th century. The monument’s construction spanned some 1500 years, from the Neolithic Period to the Bronze Age. Despite popular theories that the monument was built by Druids, Saxons, Danes, Romans, Greeks or Egyptians, it is now thought it was not built by a single group, but by several distinct tribes, across hundreds of years. It is considered the most architecturally sophisticated prehistoric stone circle in the world. The monument contains over 100 massive stones quarried from different parts of England and Wales – it remains a mystery how the stone was transported to Stonehenge. Some believe the popular legend that this was the magical handiwork of the wizard Merlin. The original purpose of Stonehenge is also a mystery. Some believe it was a Druid temple, or a complex astronomical clock built to predict eclipses. It has even been suggested it was a landing space for ancient alien UFOs. More likely explanations include the use of Stonehenge for ceremonial worship, as a burial ground, or religious pilgrimage destination.

Designer and Builder notes

The mystery of Stonehenge has captivated me since I was very young. Finding a way to capture the feel and presence of this ancient structure on a minifigure scale proved to be more of a challenge than I first thought. It was harder than expected to get the detail in a model that size. The stones are all totally unique and there is barely a flat surface on any of them, so I had to use the smallest of LEGO bricks and plates available to achieve the rough texture that they have. I also chose to use the SNOT (Studs Not On Top) technique – turning the bricks and plates of their sides – in order to use the studs as the various bumps and textures. But this caused trouble when I had to make the really small stones! Even though the real stones are all mostly grey, I snuck in some silver plates to add a bit of magic to the model. Can you spot them? I’m really happy with how they turned out and I hope everyone enjoys the little characters walking among the stones. Some eagle-eyed fans might spot the super-secret book reference, too. – *Clay*

A Sunday on La Grande Jatte–1884

Designed by: Ryan Mcanught

Piece count: 180,000

Built by: Troy Walker, Claire Ashworth

Build hours: 103

Wonders of a Sunday

Date: 1884 - 1886

Size: 207.5 centimetres long, 308.1 centimetres wide

Place: Paris, France

Georges Seurat's oil on canvas, A Sunday on La Grande Jatte – 1884, is his largest and most famous work. It depicts 19th century Parisians relaxing in an urban park on the island of La Grande Jatte, in the Seine River. The diversity of action in the scene has captured attention since it's reveal in the late 19th century due to the sheer number of individuals squeezed into the scene, bursting with colour and detail, competing with smaller details such as the animals, trees, boats, and river itself. These people, Georges Seurat himself commented, were to embody the same gravitas as an ancient Greek frieze; he wanted to give them the importance of a classical painting. Seurat used tight, dot-like dabs of paint to create this scene, a technique he pioneered and made famous, which was later called 'Pointilism'. He reportedly preferred the term 'Divisionism', which depicted the play of light across scenery by separating colour into small touches, side by side, for the viewer's eye to blend. A Sunday on La Grande Jatte – 1884 has been held in the collection of the Art Institute Chicago since 1924.

Designer notes

I'm proud to admit I'm a refugee from the 1980s. And my favourite film of all time is Ferris Bueller's Day Off. And one rather poignant scene is where Ferris and his two friends are in the art institute of Chicago staring at the painting, it really conjures up, at least to me, the moment where young people are finding something in their lives.

When I set out designing this, I decided to try and get as many single LEGO colours in the picture as I could, and the only real way to achieve that is to use a 1x1 x 2/3 brick, or as it is known a "cheese slope" because it looks like a piece of cheese. It is the one LEGO part that comes in the widest range of colours. What it also does is change the way the picture looks, especially in direct contrast to its point-painting style. Depending on the angle you observe it from, it looks dramatically different. Also, see if you can spot the hidden message in the painting. – *Ryan*

Builder notes

This painting by Georges Seurat is done in the pointillism style, which is another way of saying it's made from thousands and thousands of tiny painted dots. This is a quite a special way to paint. As such, our LEGO representation of this famous painting also required a special building technique – thousands upon thousands of tiny wedge-shaped

LEGO bricks. The bricks used are tiny wedge or slope shaped bricks, much like roof tiles, often known colloquially by LEGO fans as ‘cheese’, since they look much like a wedge of cheese. An added advantage of this choice of bricks is that they come in a wide range of colours, perfect for this colourful painting.

These cheese slopes are pointy at the top, so when it came to pushing them down to build the painting, it was rather, well, “ouchy”. Placing a few doesn’t present any problems, even a few hundred would be of no concern, and however thousands is a different matter. The solution to avoiding sore fingers was a tool, a tool made of LEGO of course! We would first place the bricks in place, then use the tool to push them down – no ouch at all! The end result is this unique LEGO representation of a very unique painting. – *Troy & Claire*

Arc de Triomphe

Designed by: Ryan McNaught, Centuri Chan

Piece count: 30,000

Built by: Ryan McNaught, Centuri Chan

Build hours: 170

Wonders of the Arc de Triomphe

Date: 1806 - 1836

Size: 50 metres high, 45 metres wide, 22 metres deep

Place: Paris, France

Napoleon Boneparte envisioned Paris, the capital of his empire, to be the most beautiful city in world, and the Arc de Triomphe was to be the ceremonial entrance to this grandeur. He commissioned the triumphal arc in 1806 to commemorate the achievements of the French military, after his decisive victory at the Battle of Austerlitz in 1905. Work on the Arc was initially slow, and ground to a halt with Napoleon's abdication and the Bourbon Revolution (1814). Work resumed in 1823, after King Louis VIII's invasion of Spain to reinstate King Ferdinand VII's absolute monarchy inspired a renewed interest in the project. King Louis-Phillipe officially opened the monument in 1836. As intended, the Arc de Triomphe is a military memorial, boasting four large relief sculptures dedicated to France's military action. The most famous of which is 'the Departure of the Volunteers', popularly known as 'Le Marseillaise'. Beneath the Arc lies the Tomb of the Unknown Soldier, opened in 1921 to commemorate the huge loss of life France suffered during the First World War. Positioned in the centre of Place Charles de Gaulle, at the intersection of 12 radiating avenues, the Arc de Triomphe is a strong, symbolic icon of France.

Designer and Builder notes

Parlez vous francais? Well actually I don't, but this building, along with its cousin the Eiffel Tower, is as much a national icon as anything. While it looks simplistic, the real trick with this model is actually the arches. They are both significantly large and also incredibly detailed, so getting them and their shape right was a real challenge.

During the build process we decided on a split focus, with Centuri working on the statues and me doing the formwork and main building. This really allowed the two of us to nail it. The statues are each different and present their own challenges, and the main building has some significant detail which allows the highlighting of the statues.

There is quite a few advanced techniques in the model's build, with, in a lot of instances bricks facing many different directions. There is also quite a bit of geometry which pushes the capacity of what LEGO can do. – *Ryan & Centuri*

Notre-Dame de Paris

Designed by: Centuri Chan

Piece count: 9,532

Built by: Centuri Chan

Build hours: 65

Wonders of Notre-Dame

Date: About 1160

Size: 130 metres long, 48 metres wide, with a 35 metre high roof. The two Gothic towers rise to 68 metres high

Place: Île de la Cité, Paris, France

Notre-Dame de Paris (‘Our Lady of Paris’ in French) is the most famous Gothic cathedral of the Middle Ages. It was built on the ruins of two earlier churches, over the site of a Gallo-Roman temple to Jupiter. Maurice de Sully, Bishop of Paris, established the idea of converting the ruins into an imposing, magnificent new cathedral in 1160. Pope Alexander III laid the foundation stone three years later, and the Cathedral was continually added to until the early 14th century. Notre Dame has endured numerous changes of monarchical, governmental and popular control, with each period of French history leaving its mark on the cathedral. During the reigns of Louis XIV and Louis XV, towards the end of the 17th century, many of the tombs and original stained glass windows were destroyed. The French Revolution aimed to turn the Cathedral into a ‘Temple of Reason’ by destroying religious sculptures along the western façade, with Lady Liberty replacing many original Virgin Marys on the alters. Despite restoration works in the mid-1800s, the Cathedral was met with more misfortune in 1871, when a short-lived civil uprising set fire to the building. Again in 2019, Notre-Dame was partially destroyed by fire while it was undergoing renovation and restoration. Currently closed, it is hoped, the Cathedral will reopen in time for the 2024 Olympic Games in Paris.

Designer and Builder notes

The Notre Dame Cathedral has an immense amount of detail, so when presented with the challenge to build it in LEGO, some compromises had to be made. To build the entire cathedral at mini figure scale would be a huge task, and to reduce the size would not do the landmark any justice. I decided to focus on the main facade, which in itself was a challenge because the building is so ornate.

I used a combination of light grey and dark grey for some detailing. This meant that I was able to use grey mini figures for some of the statues, where others were built from bricks. One of my favourite features to build was the rose window. The stained glass element was made entirely of transparent coloured bricks. Not only was it fun to add so much colour to an otherwise grey cathedral, the addition of lighting behind the window adds another dimension to the model and really makes the window stand out.

Of course, this French icon would not be complete without the sea of tourists flooding in with their cameras, as well as the Hunchback striding across the rooftop with bell in hand. – *Centuri*

Burg Eltz Castle

Designed by: Centuri Chan, Mark Curnow

Piece count: 75,000

Built by: Centuri Chan, Mark Curnow, Mitchell Kruik

Build hours: 90

Wonders of Burg Eltz

Date: Rudolf von Eltz's small castle complex was developed in 1157, and built upon over 500 years to become the modern day Burg Eltz Castle

Size: 40 metre high buildings, set atop the Eltzbach rock, which towers up to 90 metres above the surrounding valley

Place: Wierschem, Germany

The Eltz family has owned Burg Eltz Castle for over 800 years. Throughout the centuries, it has survived political unrest, religious turmoil, sieges and warfare (not to mention family politics). In 1157, Emperor Frederick I Barbarossa issued a deed of donation for property, witnessed and signed by Rudolf von Eltz. Rudolf von Eltz could be considered the father of Burg Eltz. His smaller castle complex was built upon after the deed of donation; the building essentially growing with the Eltz family. The family grew to hold significant positions of political, military and religious power, mirroring the varying fortunes of the Castle across 30 generations. In 1268, Rudolf's descendants, brothers Elias, Wilhelm and Theoderich, disputed the rightful inheritance of the castle, and split Burg Eltz between their three separate branches of their family. These different branches of the family, and their descendants, continued to build separate dwellings within the castle walls over the next 400 years, resulting in a collection of eight high-rise towers, built around a central courtyard. As a result, the buildings of Burg Eltz Castle combine 500 years of architectural styles, from Romanesque to early Baroque, effectively creating a timeline of European architectural history within its walls.

Designer and Builder notes

I've always wanted to build a huge fantasy castle from LEGO and the German Burg Eltz is like a fantasy castle come to life! The real castle is perched on a rocky outcrop on a river bend and this provided my first real challenge. The castle's buildings and walls are all built around the natural rock formations of the hill, meaning they are at different levels to each other and often have doors at more than one floor, with paths, stairs, tunnels and roads weaving in between, making this one of the most vertically varied models in the show. I had to turn my normal building process on its head – rather than building the rocks then fitting the buildings around them, I often built the building's walls first then constructed the rocks around them! I tried to steer away from the stereotype of the grey stone castle by building and mottling the walls of the various buildings in different colours, too.

When it came to adding mini figures to the castle I mixed the historical, the fantasy and the modern in this model to depict the castle's status as a historical monument as well as a tourist destination and an inspiration for myths. I particularly had fun adding the two tunnels with the goblins and the dwarves digging toward each other! Also being German, there had to be a sausage or two in there – how many can you find? – *Centuri, Mark & Mitchell*

St Basil the Blessed

Designed by: Mark Curnow

Piece count: 71,689

Built by: Mark Curnow

Build hours: 320

Wonders of St Basil's

Date: 1554 – 1560

Size: The Church is made up of eight smaller chapels built around a tall central nave, measuring almost 50 metres in height

Place: Red Square, Moscow, Russia

The Church of St Basil the Blessed remains a truly unique building; its design had no precedent or contemporaries at the time of its construction, nor since. The church was built by Tsar Ivan IV, popularly known as 'Ivan the Terrible'. Ivan was a devout adherent to the Orthodox Church, which is surprising given that he was known as a morbidly suspicious, vindictive ruler, who was fond of public executions and calculated symbolic cruelty. Given his personality, it's unsurprising that Russia was at war for most of Ivan's rule. The church was a votive offering for his military victories over hostile khanates, which secured Russia a safe trade route to the Caspian Sea. The church's distinctive onion-style domes, which soon became fashionable in Orthodox architecture, were modelled on the design of the Grand Mosque in Kazan. The vibrant rainbow colours on the domes were added over a century after construction (between the 1680s and 1848), and were inspired by the Bible's description of the colourful Heavenly City, in the Book of Revelation. As part of the USSR's state-driven atheism, the church was confiscated from the Russian Orthodox community, and has operated as part of Russia's State Historical Museum since 1928.

Designer and Builder notes

This is easily the biggest and most difficult model I have ever built. The famous cathedral that sits in Red Square in Moscow has eleven towers, nine unique, colourful onion domes and almost no square metre that is not decorated! The real Cathedral is built largely from terracotta-coloured brick, so while I would've loved to build the model using dark orange Lego bricks, there simply isn't the range of parts made in that colour to create the shapes needed for the building. So the decision was made to use red Lego parts instead. If you look closely though, you can see dark orange bricks scattered throughout the model.

When we build models from Lego at this scale, we love it when sections are repeatable. That's because we can quickly build multiple copies of the same thing and presto! We have a huge model. But I quickly discovered there is very little repetition on this building. Even the terraced steps at the front of it are not the same on both sides and the decorations along the balustrades are different from side to side. Each of the main tall towers differs from the other and every level of the central tower is different to the last. To top all that off, each of the onion domes is completely different to the others. Some spiral clockwise, others anti-clockwise, some are checked, and some have diamond shapes. I had a lot of fun adding mini figures to the cathedral and especially adding the snow, which I think is a first for one of our models.

When Ryan first showed me the iconic Russian cathedral I said: "I would love to build that!" At several moments during the construction of this massive building I did ask myself: "What have I gotten myself into?" But now looking at the finished model, I am enormously proud of it. – *Mark*

Mona Lisa

Designed by: Ryan McNaught

Piece count: 27,011

Built by: Troy Walker, Claire Ashworth

Build hours: 102

Wonders of Mona Lisa

Date: 1503 - 1517

Size: 77 centimetres long, 53 centimetres wide

Place: Painted in Florence, Italy. On display at the Louvre, Paris, France

The Mona Lisa is arguably the world's most famous painting. This oil painting was the work of Renaissance artist, architect and engineer, Leonardo da Vinci. There has been much speculation over the painting's subject, but the sitter's identity has never been conclusively proven. The most popular theory, established by an art historian in 1550, maintains Mona Lisa is a portrait of Lisa Gherardini del Giocondo, wife of a Florentine merchant. Others argue Mona Lisa could have been various royal or upper class women of the time, perhaps a portrait of da Vinci's mother, or even that she is the female embodiment of da Vinci himself, given the facial similarities between the artist and his subject. The Mona Lisa revolutionised contemporary portraiture. Da Vinci's masterpiece encouraged artists to create a more free interpretation of their sitter. Its effect is noticeable in portraiture throughout the Renaissance, to the 17th and 19th centuries, even influencing the style of Picasso. Mona Lisa has inspired numerous replicas, often by da Vinci's own students and contemporaries, and is planted firmly in popular culture with music, film and commercial interpretations.

Designer notes

There is no more famous painting in the world, so was an easy choice for me to have in the exhibition. However, when I was designing her, I soon realised that her small size really wouldn't let me get the level of detail I needed in there, so I had to go much bigger, and I certainly did. For those who know the history of the painting, there is a lot spoken about her smile – or not smile as it were. In the end, her mouth alone took me just over six hours' worth of tinkering before I was satisfied, and her eyes were the best part of a day and half. With a very limited colour palette, she was not easy to design at all. Part of me says that she is my finest LEGO mosaic ever. What do you think? – *Ryan*

Builder notes

A LEGO mosaic of a painting, simple enough task … or is it? Arguably the most famous painting in the world, from arguably one of the most famous artists of all time, Leonardo da Vinci, with of course perhaps the most famous smile captured in any medium – the Mona Lisa. Simple enough task! Our masterpiece of the masterpiece is somewhat larger than the original's seventy-seven by fifty-three centimetres: in fact, almost two and a half times bigger! The reason behind making it larger, of course, is to best capture the details in the original painting. Plus a large size obviously gives more visual impact from a long distance. We spent quite some time ensuring the smile, and furthermore the famous face was captured as best as possible in our "children's toy" medium. Actually, building the mosaic went very smoothly in spite of the size. This mosaic has an extra special feature: our first even LEGO frame for a mosaic. The frame really helps to bring across the "painting" aspect of the famous image. – *Troy & Claire*

Statue of David

Designed by: Russell Søren-Larson

Piece count: 100,000

Built by: Claire Ashworth

Build hours: 133

Wonders of the David

Date: 1501 - 1504

Size: Almost 5.2 metres (17 feet) tall

Place: Florence, Italy

The Statue of David was Michelangelo's first iconic piece of artwork. It was lauded as a revolutionary work of extraordinary artistic genius. The marble sculpture established Michelangelo as a world famous artist. Michelangelo di Lodovico Buonarroti Simoni was a Florentine sculptor, painter, architect and poet who had an unparalleled influence on the development of western art and culture. Michelangelo's marble depiction of a young David from the Old Testament: heroic, powerful, spiritual and energetic, symbolised Renaissance Italy's ideal of male perfection. Scholars regard the Statue of David to be almost technically perfect and, at the time of its completion, Michelangelo was considered a genius amongst his contemporaries. He was a true Renaissance man, with many cultural accomplishments; he was a prolific poet and mastered numerous art forms. He is also famous for his many other masterpieces, among them: painting the ceiling of the Sistine Chapel and the sculptural Pietá. Michelangelo's marble carving of David was considered to be so perfect that the Florentine republic adopted the statue as its state symbol and had the Statue of David installed at the entrance of the Palazzo dei Priori (now the Palazzo Vecchio). The statue now stands in the Galleria dell'Accademia, Florence

Designer notes

After getting over the fears of trying to recreate one of the greatest masterpieces ever crafted by man out of a child's toy, we quickly fell in love with the challenge. We always approach the challenge of design by digging into the history of subject at hand. As we set the plan for David, we talked through the history and significance of the aesthetic construct of the original statue. Several potential versions were considered, such as the final brick model having a gilded slingshot, or the optional fig leaf. In the end, we agreed that the final model would be built out of white to match the stone finish we all recognise as David. It was easily one of the most challenging designs we have ever worked on. To recreate a human face has to be the most difficult subject matter possible – David was no exception. – *Russell*

Builder notes

As you can imagine, building a model of such stature required a lot of maneuvering to work my way from his sizable feet all the way up to the tip of his head. I started the build sitting on a chair and finished up a metre and a half in the air on a scaffold. Just as well I am not afraid of heights! Due to the level of detail required to capture David's handsome features, his head is made mostly out of plate with some brick and complicated SNOT elements to bring his face to life. Personally, I think David is one of my most impressive builds to date in terms of sheer scale and likeness. Building David out of LEGO may not have required the same time and strength as chiseling him from stone. But I still felt like a bit of an artist when it was all said and done. – *Claire*

Leaning Tower of Pisa

Designed by: Ryan McNaught

Piece count: 41,886

Built by: Ryan McNaught

Build hours: 127

Wonders of the Leaning Tower

Date: 1173 - 1370

Size: Designed to be 56 metres high, it has since sunk to 54 metres in height

Place: Pisa, Italy

The Tower of Pisa, or Torre Pendente di Pisa, is a white marble bell tower with an incredible lean. The tower has always been unstable. When three stories were completed, it was noticed the foundations were settling unevenly in the marshy ground. At this time, war broke out between Pisa and Genoa, and the building was left unfinished for almost a century, allowing the foundations to settle. When building recommenced in 1272, chief engineer Giovanni di Simone sought to balance this southerly lean by building the remaining storeys slightly taller on the short side. However this added weight, causing the tower to lean even more precariously. Over four centuries, the tower's bells were installed – the largest weighing 3,600 kilograms. The larger bells were silenced in the 20th century, fearing their ringing caused the tower to further sink. At this time, the tower leaned 5.5 degrees or 4.5 metres from perpendicular. The tower has since been slightly straightened through painstaking conservation works involving lead counterweights, underground cables and heavy earth moving. This work has effectively decreased the angle of the lean to 4.1 metres from perpendicular; an improvement the engineers believe will keep the tower stable for another 200 years.

Designer and Builder notes

Pretty much everyone who has been to Italy has been to the Leaning Tower of Pisa, so it was an easy selection as one of the "wonders". Then of course reality sets in – its round! (LEGO bricks are rectangular.) And it's on a five-degree lean! It is also made up of a mountain or arches! All of this adds up to it being the "anti-LEGO".

There was a lot of challenges in its design, not the least of which the fact that not every LEGO brick comes in every colour. So often the ideal part didn't come in the needed colour, meaning I had to come up with other solutions. But often that meant a result that was better than my original plan anyway. I really enjoyed making this model a lot. It reminded me of when I made the large Roman Colosseum back in 2011. – *Ryan*

Saint Mark’s Square

Designed by: Centuri Chan

Piece count: 21,185

Built by: Centuri Chan

Build hours: 119

Wonders of the Square

Date: Constructed in the 9th century

Size: 12,128 square metres

Place: Venice, Italy

The Piazza San Marco is the centre of Venetian life. The square reflects the wealth of Europe’s richest trading city, and its resplendent architecture bears the marks of the eastern and western trade that brought this wealth to Venice. Venetians consider their city to be divinely ordained, and have enduringly planned it, over centuries, to be architecturally magnificent. This ‘myth of Venice’ derives from a belief in the divine blessing of the community by St. Mark, protection from barbarians by the city’s surrounding lagoon, and careful administration by a governing constitution that blends monarchy, aristocracy, and republican liberty. It is against the backdrop of this divine legend that Piazza San Marco has flourished as the ‘jewel in the crown of Venice’. As the largest piazza in Venice, it is the political, religious and artistic centre of the city; accommodating the Basilica (which seats the patriarch of Venice), as well as many civic, and government offices. It is often the first site in Venice to flood, when the tide causes the city’s canals to swell; inviting gondolas to ply the square, instead of the reigning pigeons who plague the piazza when it is dry.

Designer and Builder notes

I was looking forward to making this. It is always fun building a model of something you have seen in real life. It’s almost like revisiting that place as you put the model together. While it was challenging due to the size and scale, it was my favourite model to build for this exhibition. There was a fair amount of planning involved as Saint Marks Square in reality is a huge place made up of several unique buildings. I chose to focus on the cathedral (east) end of the square, but I also wanted to include some of the waterfront, as it wouldn’t be Venice without the canals and gondolas. This would ultimately determine the boundary of the LEGO model. The other interesting point I had to consider is that Saint Marks Square is not actually a ‘square’, which meant some buildings are at odd angles. I challenged myself to feature these angles in the model.

I approached this build as a series of small building projects. Each of the buildings had a different design and details which made the construction of each quite interesting. The final building to be added was the bell tower. Using dark orange, white and sand green for the roof, this tower sits in the centre of the model and towers above all of the others, creating a striking centrepiece. To add to the already colourful and detailed model, I populated it with its characteristic outdoor restaurant seating, boats and activity on the water, and mark stalls. To add to the realism, you’ll see that in some places the model is flooded with water, as well as tourists! – *Centuri*