

Find your match

Game reference and answer sheet - Set 1

Print and cut the game cards

Print the reference and answer sheet

Allocate 1 set (5 pictures, 5 name cards and 20 fact cards) to each group and lay face down

Students have to match and arrange pictures to names and facts (4 facts per picture)

Allocate 15-20 mins

First to finish raises hands for checking (Groups can mark one another). Others continue to finish

Students move onto S2. Allocate 15-20 mins



© Sam Wermut, Unsplash

Sydney Opera House, Sydney, Australia

It was added to UNESCO's World Heritage List in 2007

Work commenced in 1959 and took 14 years to complete. 10,000 construction workers were involved

There are more than 1 million roof tiles covering approximately 1.62 hectares sitting over the structure. They were made in Sweden

Architect Jørn Utzon incorporated sustainable design elements such as a seawater-cooling system

Facts taken from:

<https://www.sydneyoperahouse.com/building/interesting-facts-about-sydney-opera-house>

<https://www.sydneyoperahouse.com/about-us/in-the-community/environmental-sustainability>



© Anyaivanova, iStockphoto

Big Ben, London, United Kingdom

It is found in the Elizabeth Tower at the North End of the Houses of Parliament

It contains a bell inside a clock tower weighing more than 13 tonnes, which first rang out in 1859

It underwent a major conservation project from 2017-2022, bringing together many hundreds of specialist craftspeople with skills including stone masonry, gilding, glass cutting and horology

It stands at 96 metres tall, with 334 steps to climb up to the belfry

Facts taken from:

<https://www.visitlondon.com/things-to-do/sightseeing/london-attraction/big-ben>

<https://www.parliament.uk/about/living-heritage/building/palace/big-ben/elizabeth-tower-and-big-ben-conservation-works-2017-/>



© Ronald Tilleman for Edge

The Edge, Amsterdam

Its design is orientated and shaped in a way that the power of the sun is optimally utilised with the glass facade ensuring that daylight can be benefited from as long as possible, without the heat of the sun influencing the temperature inside

Internationally acknowledged as the most sustainable and most likely the smartest office building in the world

The sophisticated design, combined with smart and advanced technology, resulted in a 98.36% (BREEAM-NL) sustainability score for the building

Everyone who utilises this building with a smartphone or tablet may regulate the light and climate of their workplace using a special app

Facts taken from:

<https://edge.tech/buildings/the-edge>



© Tyler Mower, Unsplash

Petronas Towers, Kuala Lumpur, Malaysia

With a total height of 452 metres, the highest occupied floor is the 88th floor at 375 metres high

A double deck skybridge sits at 170 metres high from the ground, designed as a safety device in case of fire or other emergencies

The unique design, composed of two crossing squares that overlap and each of eight intersection points of two squares surrounded by a small circle, is based on a Muslim symbol known as Rub el Hizb

To support a planned 6-year delivery date, two construction consortiums were hired to work on the structure simultaneously

Facts taken from:

<https://thetowerinfo.com/buildings-list/petronas-towers/>



© Varun Yadav, Unsplash

Golden Gate Bridge, San Francisco, United States

Upon its completion in 1937, it was the tallest and longest of its kind in the world

It spans the Golden Gate in California to link San Francisco with Marin County

The colour is designed with a dual purpose, to blend in with its surroundings and to be clearly visible in fog

Its main span at 1280 metres long is suspended from two cables hung from towers 227 metres high

Facts taken from:

<https://www.britannica.com/topic/Golden-Gate-Bridge>

Find your match

Game reference and answer sheet - Set 2

Print and cut the game cards

Print the reference and answer sheet

Allocate 1 set (5 pictures, 5 name cards and 20 fact cards) to each group and lay face down

Students have to match and arrange pictures to names and facts (4 facts per picture)

Allocate 15-20 mins

First to finish raises hands for checking (Groups can mark one another). Others continue to finish

Students move onto S2. Allocate 15-20 mins



© Riyas Mohammed, Unsplash

Burj Khalifa, Dubai, UAE

Over 40 wind tunnel tests were conducted, to examine effects wind would have on the structure and its occupants

At over 828 metres and more than 160 stories, it holds 7 world records

In just 1325 days since excavation work started in January 2004, it became the tallest free-standing structure in the world

One of its leading environmental features is the way it saves water from its air conditioning system and redistributes it for land irrigation and the building's showpiece fountain

Facts taken from:

<https://www.burjkhalifa.ae/en/>



© J M Lopez, Unsplash

Sacre-Coeur, Paris, France

At 213 metres high, this is the second highest point in the city. It is built on Montmartre hill, which measures 130 metres high

It is built of a special stone resistant and impenetrable by water. When it rains the stone releases a substance called 'calcite' which keeps the stone clean and white

Since 1885, you can spend the night for free if you are willing to give up an hour to pray

Construction started in 1875 and took 39 years to complete, opening its doors to the public in 1914

Facts taken from:

<https://www.enjoytravel.com/en/travel-news/interesting-facts/interesting-facts-sacre-coeur>



© Moï K. Malik, Unsplash

Shanghai Tower, Shanghai, China

It is one of the most sustainably advanced tall buildings in the world, sitting at 632 metres high

The structure's second transparent glass skin is a key part of its 'green design'. The second skin wraps around the entire building and helps conserve energy by modulating the temperature between the inner and outer layers – warming up cool air in winter and dissipating heat in the summer

270 vertical wind turbines were installed near the top of the structure, expected to provide 10% of the building's electricity

Its design reduced the effects of wind on the building by up to 24%, reducing the amount of construction materials engineers needed

Facts taken from:

<https://www.ice.org.uk/what-is-civil-engineering/what-do-civil-engineers-do/shanghai-tower>



© Michael Stevanus Hartono, Unsplash

Gardens by the Bay, Singapore

As part of their sustainability effort to conserve energy, non-essential decorative and accent illuminations are switched off at night

Parts of the structure are embedded with environmentally sustainable functions including photovoltaic cells to harvest solar energy

A national garden and horticultural attraction, comprising three distinctive waterfront gardens

Comprising two glass biomes, the conservatories are a statement in sustainable engineering and apply a suite of cutting-edge technologies for energy-efficient solutions in cooling

Facts taken from:

<https://www.gardensbythebay.com.sg/>



© Landsec

The Forge, London, United Kingdom

Built using a highly efficient and sustainable platform approach made it Landsec's first net zero carbon development and a landmark in sustainable office builds

Offers 90,000 sq. ft of quality CAT A office space set around an activated public courtyard

Environmental features of this building include 100% renewable electricity, rainwater harvesting, 100% of waste diverted from landfill and high-performance glazing

There are several wellbeing features within this building including terrace space, cycle spaces, LED lighting and bright breakout spaces

Facts taken from:

<https://theforgebankside.com/>