

Urban Pioneers

What is a city?

A city is a large settlement where lots of people live and work. Businesses and banks are located in the centre of a city. There are shopping districts full of shops and many restaurants, cafes and bars. Cities have good transport links so people can easily get in and out to work and shop. Train stations, bus stations and coach depots are usually in the centre of a city. Some people live in city centres, usually in flats, but many live in the residential areas surrounding cities, called suburbs.

Features of a city



cathedral



tourist office



city hall



train station



main square



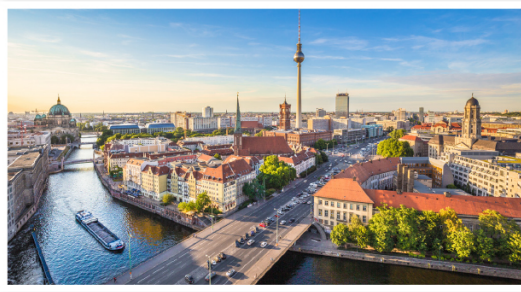
shops

History of a city

Most cities developed near rivers and ports, which provided good transport links, or were close to natural resources, such as coal. Industry is often an important part of city life and different cities are known for their industries. Sheffield, in northern England, is an important centre for steel production and Stoke-on-Trent, in Staffordshire, is associated with the pottery industry. The history of a city can include major events, famous people who have lived there and important buildings and landmarks. Monuments and statues often celebrate the history of a city.

Berlin

Berlin is the capital city of Germany and home to over 3.5 million people. The city was heavily bombed during the Second World War and many buildings were destroyed. When the war ended in 1945, the city was split into four parts. In 1961, a wall was built to separate East and West Berlin. The wall was finally pulled down in 1989, making the city whole again. There are several famous landmarks in Berlin, including the Brandenburg Gate and the Reichstag Building. Berlin has an underground railway system, called the U-Bahn. It is also connected to other German cities by motorways called the Autobahn.



Berlin skyline

Urban art

Art created outside on walls and buildings is known as urban art. Graffiti is a form of urban art that is mainly made up of words, whereas some pieces of urban art include pictures too. Urban artists use spray paint to create words and pictures that usually show the feelings of the artist or give a political message. Urban art is now part of popular culture, thanks to artists such as Banksy. It is important to remember that it is illegal to create graffiti or other forms of urban art on walls or buildings without permission.



24 hours in a city

Early morning	Street lights turn off. Lorries deliver fresh produce to shops. Rush hour starts as people travel to work in cars or on public transport.
Morning	Factories, shops and businesses are busy. Schools, colleges and universities are full of students and teachers. Parks are visited by young children and parents.
Lunchtime	Workers move around the city in their lunch hour. Cafes and restaurants are crowded.
Afternoon	Parents collect children from school. Pedestrian and road traffic increases. Street entertainers perform to passers-by.
Evening	Street lights turn on to light the city at night. Roads, trains and buses are busy as people travel home from work. People visit restaurants, bars and cafes.
Late night	Roads are quieter. Hospitals and emergency vehicles are active. Workers repair and maintain roads.

Lighting a city

Light sources are used in different ways in a city at night. Street lights provide light for cars and pedestrians to see where they are going. Traffic lights control the traffic and guide pedestrians safely across roads. Some important buildings, such as cathedrals, town halls and galleries, are lit up at night to make them look attractive. Illuminated advertising boards flash to gain the attention of passers-by. Pictures of Earth from space at night show brightly lit areas where cities are located.

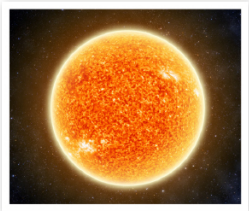


Light from the Sun

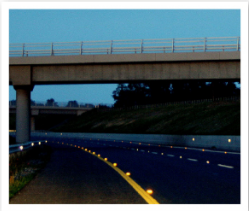
The Sun is our main source of light. The light from the Sun contains the visible light that we can see, and also light that we cannot see, called ultraviolet. It is this ultraviolet light that causes our skin to tan but also to burn. It can also damage our eyes. Sunglasses are important to protect eyes in bright sunlight. They block out the harmful ultraviolet rays and stop them reaching and damaging our eyes. It is important never to look at the Sun directly.

Sources of light

A light source is something that gives out light. Light sources can be natural, such as the Sun, or man-made, such as electric light bulbs. Some objects also appear to give out light but are not light sources. Instead, these are reflectors of light. For example, 'cat's eyes' in the road reflect the light from car headlights. The Moon reflects the light from the Sun. High visibility safety clothing also reflects light, making cyclists and runners more visible at night.



The Sun is a light source



Cat's eyes are light reflectors

Shadows

A shadow is formed when light from a light source is blocked by an opaque object. The shadow is always formed on the side of the object furthest from the light source. The size and shape of a shadow depend on the position and size of the light source compared to the object. For example, when the Sun is low in the sky at the beginning and end of the day, shadows are long. When the Sun is overhead in the middle of the day, shadows are short.



Glossary

Brandenburg Gate	A monument in Berlin, built on the site of a former city gate.
capital city	A city that is the centre of government of a country.
depot	A building where vehicles, especially buses or coaches, are kept.
district	An area of a city or country.
industry	An activity involving the production of goods in factories.
light source	Something that produces and gives out light, such as the Sun.
monument	A building, statue or structure that is built to honour an event or person.
opaque	An object or material that can not be seen through.
pedestrian	A person who is walking rather than travelling in a vehicle.
port	A town by the sea or by a river that has a harbour.
Reichstag Building	A historic building in Berlin that was once used as a parliament building.
reflect	To send back light, heat or sound without absorbing it.
residential	An area where there are private houses, not offices and factories.
settlement	A place where people live.
urban	In, from or belonging to a town or city.