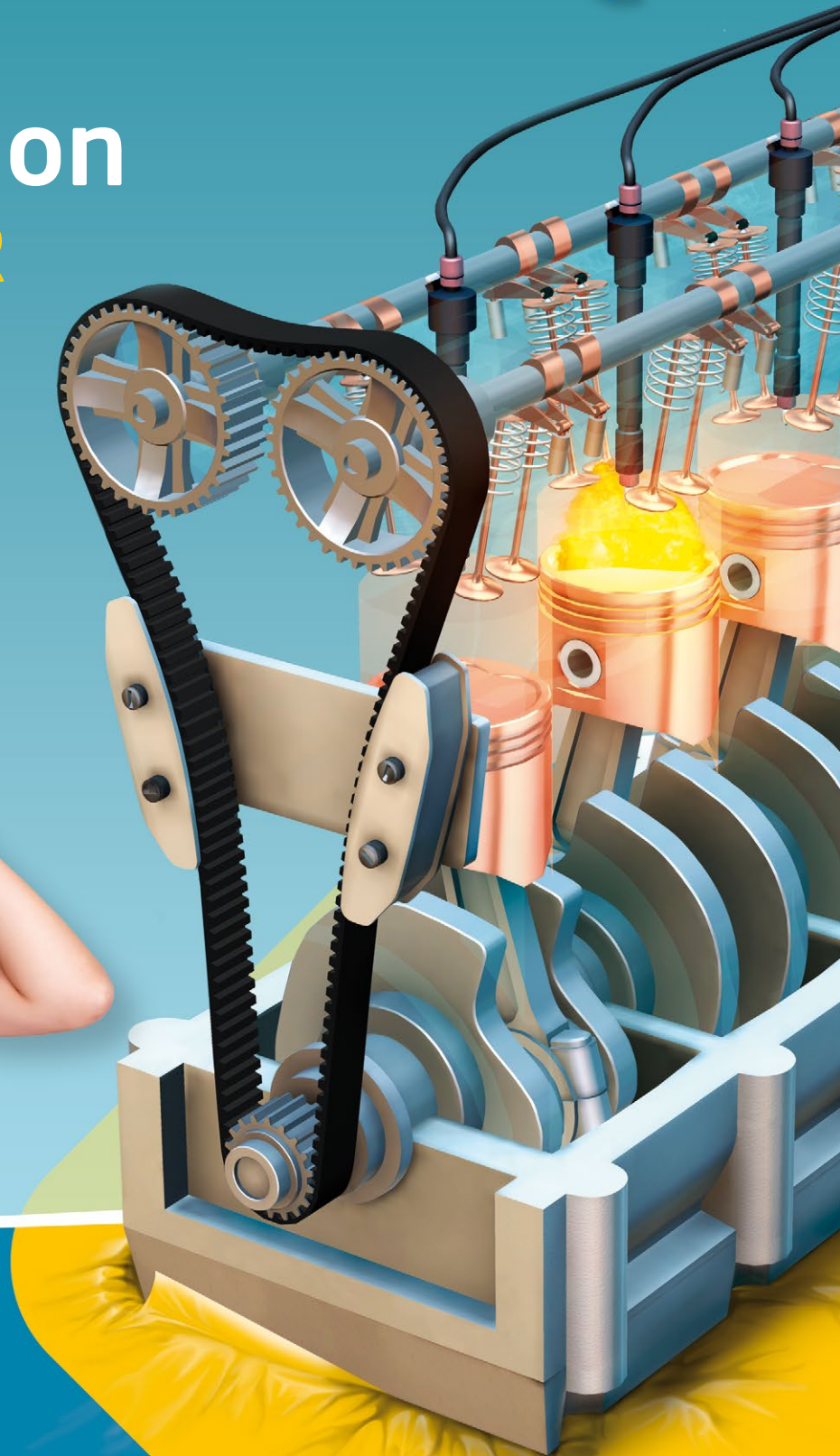




Specification

mozaik3D VR

Virtual reality
in 3D animations



Content

Application

Table of content



Our 3D VR application has been designed mainly for students between 8 and 18 years of age.

The interactive educational scenes related to History, Technology, Physics, Mathematics, Biology, Chemistry, Geography and Visual Arts will turn learning into an adventure.

Virtual Reality

The mozaik3D VR application is also available in the Meta and Pico app stores. The more than 110 interactive educational 3D scenes related to history, technology, physics, mathematics, biology, chemistry, geography and visual arts make learning an adventure, providing a native VR experience. The list of VR-compatible 3D scenes is continuously expanding.

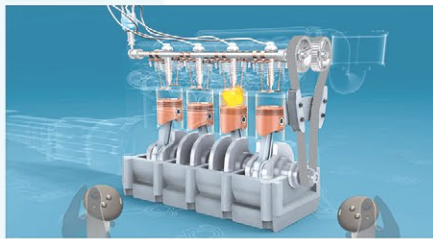
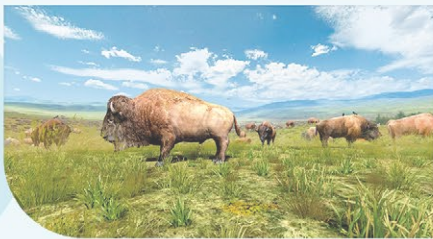


Content:

- Interactive 3D main menu to browse scenes
- More than 110 VR 3D scenes
- Topics: geography, biology, history, physics, technology, visual arts, chemistry, mathematics
- Integrated search function in the list of 3D scenes
- Option to list 3D scenes marked as favourites by the registered user
- Several pre-set camera angles for each VR scene (2-10)
- Walk mode enabling movement in the 3D scenes
- Labels and captions that can be turned on and off
- Built-in narrations and music
- Possibility of reporting errors and sending feedback

mozaik3D VR - Application

Our interactive 3D scenes can be rotated, enlarged, and viewed from pre-set angles. Navigate through the complex scenes easily with the help of the predetermined views.



Most of our 3Ds include narrations and built-in animations. The 3D scenes are available in several languages, which also offers an excellent opportunity to acquire and practise foreign languages. Some of the 3D scenes contain a walk function, enabling you to explore the scene yourself by using the virtual joystick.



WALK



NARRATION



VR FUNCTION



SEARCH, FILTER

Application:


- Multiplatform
- PC: Windows, MacOS, Linux, ChromeOS
- Mobile: iOS, Android
- VR: Meta Quest 2/3/3s, Pico 3/4 normal + Enterprise
- Interactive VR environment, controller-based use with full functionality

BIOLOGY - Human body, flora and fauna

1		African elephant	The largest land mammal on Earth.
2		American bison	American bison
3		Anatomy of the spinal cord	The spinal cord is the part of the central nervous system, running inside the spine, from which spinal nerves branch out.
4		Archaeopteryx	The archaeopteryx shows characteristics of both birds and reptiles. It is probably the ancestor of birds.
5		Bacteria (advanced)	Bacteria are unicellular organisms that have no nuclei and are a few micrometers in length.
6		Bacteria (spheres, rods, spirals)	Bacteria occur in a wide range of shapes, including spheres, rods and spirals.
7		Carboniferous flora and fauna	This animation presents some animals and plants that lived between the Devonian and Permian periods (358–299 million years ago).
8		Cells	Eukaryotic cells contain a number of organelles.
9		Cereals	Cereals are species of grasses cultivated for their edible grains.
10		Circulatory system	Systemic circulation carries oxygenated blood from the heart to the body, while pulmonary circulation carries oxygenated blood from the lungs to the heart.
11		Common bottlenose dolphin	Bottlenose dolphins are sea mammals which use ultrasound for orientation.
12		Common cuttlefish	One of the best known cuttlefish species.
13		Comparison of edible and poisonous mushrooms	Certain mushrooms are poisonous and can be fatal for humans when consumed, while others are edible and used widely in cooking.
14		Domestic horse	Horses are domesticated odd-toed ungulates that are used for many purposes.

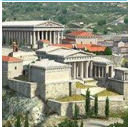





15		Dromedary	The dromedary is an indispensable animal for inhabitants of the deserts.
16		Emperor penguin	Penguins are birds living in the Antarctic and adapted to cold temperature and swimming.
17		English oak (basic)	This animation shows how trees change throughout the seasons, demonstrated by the example of English oaks.
18		European crayfish	A type of large freshwater crayfish widespread in Europe.
19		European garden spider	This animation demonstrates the anatomy of spiders through the example of a common European species.
20		Giant panda	Let's learn about the bear species that became the symbol of species conservation.
21		Marsh harrier	Marsh harriers are birds of prey found almost worldwide.
22		Quetzalcoatlus, a giant pterosaur	Quetzalcoatlus was one of the largest known flying animals of all time.
23		Rapana venosa	An invasive predatory sea snail species that inhabits warm seas.
24		Red deer	Red deer are even-toed ungulates, ruminants. Their males have spectacular antlers.
25		Stegosaurus	A type of prehistoric reptile having bony plates on its back, which aided thermoregulation.
26		The heart	The heart is the central pump of the cardiovascular system beating several billion times over our lifetime.
27		The human blood	Human blood consists of blood cells and plasma.
28		The human brain	The main parts of the human brain are the brain stem, the cerebellum, the diencephalon, and the cerebrum.
29		Triceratops	A type of herbivorous dinosaur easily recognizable by its large frill and three horns, which lived in the Cretaceous period.

SCIENCE - physics, technology

30		Airbus A380 (2005)	The double-decked, wide-bodied passenger aircraft can carry more than 500 passengers.
31		Concorde (1969)	The first supersonic passenger airliner entered service in 1976.
32		Construction of cars	This animations demonstrates the exterior and interior construction of cars, as well as their operation.
33		Container ships	Commercial maritime routes of container ships form a global network.
34		Ford Model T	The popular model of the American automobile factory was the first mass-produced car in the world.
35		Formula 1 racing car	Formula 1 is the highest class and most popular type of motor racing.
36		Four-stroke Otto engine	This animation demonstrates the type of engine most commonly used in cars.
37		How does it work? - Turbojet	This animation demonstrates how a turbojet engine works.
38		ISS	The International Space Station is a habitable satellite built with the cooperation of 16 countries.
39		Moon landing: 20th July 1969	Neil Armstrong, one of the crew members of Apollo 11 was the first man to set foot on the Moon.
40		Nikola Tesla's laboratory (Shoreham, USA)	This physicist-inventor and electrical engineer who mainly dealt with electrotechnics was undoubtedly one of the most brilliant figures of the second industrial revolution.
41		Nuclear power plant	Nuclear power plants convert the energy released during nuclear fission into electric power.
42		Offshore natural gas extraction, Norway	The Troll A is an offshore natural gas platform, the largest offshore platform ever built: it rises about 170 meters (558 feet) above water level, weighs 656,000 tonnes and its total height is 472 meters (1,549 feet).
43		Patent-Motorwagen (Karl Benz, 1886)	The Benz Patent-Motorwagen is widely regarded as the first vehicle propelled by an internal combustion engine.

44		Seawater desalination	The desalination process produces drinking water from seawater.
45		Stephenson's Rocket (1829)	The English engineer George Stephenson's locomotive was built for a competition of locomotives in 1829.
46		The development of celestial mechanics	This animation introduces the studies of astronomers and physicists whose works fundamentally changed our view of the universe.
47		The science of candles	Candles have been used for lighting since ancient times.
48		Titanic (1912)	RMS Titanic was the largest passenger ship at the beginning of the 20th century.
49		Watermill	Machines converting the energy of flowing or falling water into useful forms of power were already in use in the Middle Ages.
50		Windmill	Machines converting the energy of wind into useful forms of power were already in use in the Middle Ages.
51		Wright Flyer I (1903)	The Wright Flyer was the first successful powered, heavier-than-air aircraft, designed and built by the Wright brothers.

HISTORY & ARTS - lifestyle and historical architecture

52		Acropolis (Athens, 5th century BC)	The world's most famous citadel, the Acropolis of Athens was built in the 5th century BC, during the Age of Pericles.
53		African village (Sudan)	African villages adapt to the natural environment well and reflect of the culture of local tribes.
54		AH-64 Apache (USA, 1975)	The Apache attack helicopter, named after an American Indian tribe, was developed for the United States Army.
55		Ancient Egyptian house	An average Egyptian dwelling consisted of regularly arranged rooms.
56		Ancient Greek house	The average house in Ancient Greece had a rectangular, geometrical floor plan and two stories.
57		Ancient Roman aqueduct and road	The excellent road and aqueduct system covering the whole empire reflects well the development of the Roman civilisation.

58		Ancient Roman domus	Healthy citizens in ancient Rome owned large houses with varied layouts of several rooms.
59		Atomic bombs (1945)	The atomic bomb is one of the most destructive weapons in human history.
60		Baths of Caracalla (Rome, 3rd century)	The magnificent bath complex of the Roman Emperor was built in the 3rd century AD.
61		Bedouin camp	The seminomadic lifestyle of the Bedouin adapted to the climatic and environmental conditions of the desert.
62		Bell X-1	The Bell X-1 was the first manned aircraft to exceed the speed of sound in level flight.
63		Bourgeois salon	This animation compares a modern living room and a typical bourgeois salon.
64		Chinese house	A traditional Chinese siheyuan is a building complex that surrounds a rectangular courtyard.
65		Circus Maximus (Rome)	The ancient Roman arena became well-known for the chariot races held here.
66		Colosseum (Rome, 1st century)	The most famous and most magnificent amphitheater of Rome was built in the 1st century.
67		Darwin's legendary voyage	Darwin's legendary voyage aboard HMS Beagle played a crucial role in the development of the Theory of Evolution.
68		Dóm Square (Szeged, Hungary)	The Votive Church of Szeged, located on the Great Plains of Hungary, emerges from the buildings of the city's famous square, while the National Pantheon can be found under the arcades surrounding the same square.
69		Euclid of Alexandria	The Ancient Greek scientist, Euclid of Alexandria, is often referred to as the 'father of geometry'.
70		Galileo Galilei's workshop	Galileo Galilei's scientific achievements contributed greatly to the advancement of physics and astronomy.
71		Great Mosque of Djenné (1907)	The mosque, built in a distinctive architectural style, is the largest adobe structure in the world.
72		Gutenberg's press (Mainz, 15th century)	Life magazine picked Gutenberg's invention of mechanical movable type printing as the most important event of the second millennium.

73		Himeji Castle	Located close to Osaka, the Japanese castle is also called the White Heron because of its white exterior.
74		Hot-air balloon (18th century)	The French Montgolfier brothers were the first pioneers of flying.
75		Kaaba (Makkah)	Located in the Grand Mosque of Makkah, the Kaaba shrine is the most sacred site of Islam.
76		Knossos Palace (2nd millenium BC)	The largest bronze-age building complex of ancient Crete was probably the center of Minoan civilization.
77		Leonardo da Vinci's workshop (Florence, 16th century)	Visit the workshop of the Renaissance polymath and his most influential inventions and works of art.
78		Liuhe Pagoda (Hangzhou, 12th century)	The Buddhist pagoda of the six Harmonies is located in China, by the River Qiantang.
79		Machu Picchu (15th century)	The ancient Inca city, located in present-day Peru, is a World Heritage Site.
80		Mail coach service (Great Britain, 18th century)	Before the emergence of motorised vehicles, letters and packages were delivered by horse-drawn carriages.
81		Medieval inhabited bridge (London Bridge, 16th century)	In the Tudor Era around 200 buildings were built on the bridge across the River Thames.
82		Medieval town	Medieval townhouses were built from stone or brick and were several stories high.
83		Mir Castle Complex (17th century)	The Mir Castle Complex, situated in the town of Mir, Belarus was built in the Gothic-Renaissance style.
84		Nizwa Fort (Oman, 17th century)	The round tower of the largest fort in the Arabian Peninsula had an ingenious defense system.
85		Pantheon (Rome, 2nd century)	he 'Temple of all gods' was built during the reign of the Roman Emperor Hadrian.
86		Ragusa (Croatia, 16th century)	Today called Dubrovnik, this Croatian city is known for its spectacular architecture and beautiful location.
87		Roman soldier (1st century BC)	Mercenaries of the ancient Roman army were well-trained and well equipped with the most up-to-date weapons.

88		RT-2PM Topol Intercontinental ballistic missile (Soviet Union, 1985)	A mobile, nuclear-capable ballistic missile developed at the end of the Cold War.
89		Saint Alexander Nevsky Cathedral (Sofia, 20th century)	Built in Neo-Byzantine style, this Orthodox cathedral is one of the symbols of the Bulgarian capital city.
90		Stonehenge (Great Britain, Bronze Age)	The world famous monument in England still poses mysteries for archeologist.
91		Subway	The fastest track-based means of urban transportation.
92		Supermarine Spitfire (United Kingdom, 1938)	Spitfire was a legendary British single-seat military aircraft used in World War II.
93		Taj Mahal (Agra, 17th century)	The center of the Indian mausoleum complex is a white marble tomb built by Shah Jahan for his beloved wife.
94		Tanks (World War I)	Tanks developed in the mid-1910s quickly became the most important weapons of land-based military operations.
95		Tanks (World War II)	The main protagonists of World War II were tanks.
96		Teotihuacan (4th century)	Majestic even in its ruins, this city was the largest and most populous settlement in the pre-Columbian Americas.
97		The Berlin Wall (1961–1989)	A symbol of division and oppression, the Wall tore a city and numerous families apart.
98		The city of Babylon (6th century BC)	The ancient city of Babylon was built on the banks of the Euphrates River in Mesopotamia.
99		The Forbidden City (Beijing, 17th century)	The Forbidden City is one of the most magnificent and mysterious monuments of imperial China.
100		The Temples of Abu Simbel	During the construction of the Aswan High Dam, the Temples of Abu Simbel were relocated.
101		Theater of Dionysus (Athens, 4th century B.C.)	The theater that has a distinctive shape and excellent acoustics was situated at the side of the Acropolis in Athens.
102		Theater of Pompey (Rome, 1st c. B.C.)	The building commissioned by Pompey the Great was the first permanent theater in Ancient Rome.

103		Tower of London (16th century)	The intriguing history of this historic castle spans nearly a thousand years.
104		Traditional Japanese house (Machiya)	The animation shows the traditional Japanese wooden townhouse, the machiya.
105		Treasury of Atreus (Mycenae, 14th century BC)	A beehive tomb on the site of the ancient city of Mycenae, attributed to the legendary king.
106		Turkish bath	Public baths are an important part of Muslim culture.
107		Viking settlement (10th century)	Typical settlements of the Norsemen were not only established in Scandinavia, they appeared on distant areas as well.
108		Viking stave church (Borgund, 13th century)	A wooden church built in the 12th–13th centuries, the best preserved of Norway's stave churches.
109		Working-class district (19th century)	Typical working-class districts with unhealthy living conditions were built at the time of the Industrial Revolution.
110		Yuri Gagarin's journey to outer space (1961)	Yuri Gagarin became the first human in space on 12 April 1961.
111		Yurt	A circular, domed, portable tent covered by felt, typically used by nomadic peoples.