

1. What was the Iron Age?

The Iron Age was the third and final phase in “prehistory.” The period known as prehistory also includes the Stone Age (or the Paleolithic and Neolithic Eras) and the Bronze Age, or the new Neolithic Era. The Bronze Age began around 3300 BC and ended around 1100 BC, when several civilizations collapsed all at once.

Unlike the Stone or Bronze Age, the Iron Age did not have an officially recognized “beginning.” Instead, the Iron Age began whenever civilizations transitioned from making tools and weapons out of bronze to making them out of an even stronger material, wrought iron. In the Ancient Near East, for example, the Iron Age lasted from around 1200 BC to 550 BC. In Northern Europe, meanwhile, it lasted from 500 BC to 800 AD.

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2. What is Prehistory?

You have already learned about the Stone Age and the Bronze Age. However, you might not know that these two periods, along with the Iron Age, belong to an era historians call prehistory. It began around 3.3 million years ago, when hominins, or early human species, began making tools out of stone and bone. Prehistory does not have an exact end date, because it extends all the way up to the widespread adoption of writing systems. This societal change is what historians regard as the shift from prehistoric civilizations to “modernity.” Although certain scripts like hieroglyphics and cuneiform were developed around 3500 BC, it took thousands of years before most humans used some form of writing in their day to day lives. For example, in the Americas, Oceania, and Sub-Saharan Africa, complex writing systems were introduced with the arrival of European conquistadors and colonists in the 1500s. In Australia, prehistory lasted until around 1788. In the Near East, on the other hand, prehistory ended thousands of years beforehand, around 550 BC.

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3. Early Traces of Iron: An Uncertain History

Historians technically regard 1200 BC as the first year of the Iron Age. However, ancient people began using iron in its original form as early as the 4th millennium BC. While smelting iron ore required hot kilns, special tools, and knowledge of chemistry, meteoric iron, or iron in its natural state, could be found in abundance all around the world. Civilizations began digging it out of the ground and experimenting with it around 3200 BC. Some civilizations began making small pieces of jewelry and other items out of meteoric iron with regularity. Archaeologists have found artifacts in Lower Egypt, the Ganges Valley in India, Anatolia, and Mesopotamia that were forged up to 1,500 years before the end of the Bronze Age. The first civilization to smelt iron was the Hittite Kingdom. Once they switched from making tools out of bronze to forging them out of iron, they had an extreme military advantage. The Hittites began conquering other tribes and cities, and the use of iron spread throughout the Near East.

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4. The Iron Beads of Gerzeh

The earliest-known iron artifacts to be found and identified by archaeologists are nine small beads from a burial site. The burial site, which is located in Gerzeh, Lower Egypt, dates back to 3200 BC. The beads most likely belonged to a wealthy aristocrat. Some historians believe that they were part of a necklace given as a wedding present. The other beads on the necklace were made of gold and a hard material called carnelian.

The discovery of the beads is important because it shows that the iron was a part of ancient people's lives even before the Iron Age began. Blacksmithing may have been an art form in Egypt for thousands of years prior to the end of prehistory. The discovery of the beads also proves that history is fluid, and that every society took a slightly different path toward modernity. Nonetheless, most ancient people valued beautiful things, artwork, and wealth, and made great efforts to possess those items when possible.

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5. Smelting Iron: Ferrous Metallurgy

Technically, people began using meteoric iron thousands of years before the Iron Age began. On its own, meteoric iron was too soft to use for fashioning weapons and tools. The term "Iron Age," therefore, actually refers to a metal called "wrought iron," which was a chemical mixture of carbon and the meteorite iron found naturally in deposits in the ground. It was soft enough to be worked into tools, weapons, helmets, and other goods by prehistoric craftsmen, but hard enough to break apart the earth or defeat enemies in war. Nowadays, we use an "updated" version of wrought iron, or steel, for general construction and tools.

People in ancient times made wrought iron using a multi-step process known as "smelting." First, metal workers had to mine for the iron. Mining was harsh on the labourers, and required days of work before enough of the mineral was extracted from the earth. Second, metal workers melted down the iron to remove any impurities, or parts of the rock that were unusable. Next, they had to mix in carbon, which was a very complicated process, to make sure that the product had the right balance of strength and hardness. Once the wrought iron was at the right temperature, they removed it from the flames and hit it with a large metal anvil until it formed the desired shape.

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6. The End of the Bronze Age

By the end of the Bronze Age, the great powers in Europe, Africa, and the Near East were already in conflict. This era officially came to an end around 1200 BC, according to most historians and archaeologists. However, in the millennium leading up to the collapse of the Bronze Age, the major global powers had more or less remained the same for hundreds of years.

In the Mediterranean, the Minoans continued to enhance their cities, make art, and worship their gods on the island of Crete. The Mycenaean civilization also emerged on mainland Greece around 1600 BC, constructing city-states like Mycenae, Tiryns, Thebes, and Sparta. Their culture was different from that of Minoan. They were also the kingdom that battled legendary Troy in Homer's *The Aeneid*. In Mesopotamia, meanwhile, the kingdoms of Babylon and Sumer continued to expand their territories. In modern-day Palestine and Syria, the Hittites fought constantly with the Egyptians in Africa. They warred over trade routes, especially areas where precious metals like tin and copper were transported regularly. These

major civilizations maintained control of their areas until about 1450 BC, when the world began to change. These changes eventually led to a new historical era.

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7. Disaster in Crete: The Minoan Civilization Falls

Minoan was the first civilization to collapse during the Bronze Age. Around 1600 BC, natural disaster struck the island of Crete. Although historians do not know what exactly caused the damage, some believe their decline came after the eruption of the Santorini Volcano. More recently, experts have discovered evidence of a giant tsunami hitting the island as a result of the volcanic explosion. The enormous waves would have destroyed their fleet of ships, which they relied on for trade. Without access to the Atlantic trade routes, the Minoan civilization became weak. They were likely attacked by the Mycenaeans once their enemies knew how vulnerable they were. Within 150 years of the catastrophic tsunami, most Minoan temples and townships had been destroyed by invaders. The Mycenaeans were also probably responsible for the destruction of King Minos' palace in Knossos. Archaeologists excavated the site in the early 20th century, providing a lot of information about the once powerful civilization of Crete.

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8. The Mycenaeans in Greece

For a few hundred years after the decline of the Minoans in Crete, a different civilization ruled the Mediterranean. They were called the Mycenaeans, and they lived on the Argolid Plain in Peloponnese, Greece. The capital city was called Mycenae, although the kingdom also included other important urban centers like Thebes, Knossos, Pylos, and Tiryns. At the height of their power, the Mycenaeans constructed a citadel with a great central hall called a megaron where they gathered for meetings and market days. The citadel was surrounded by giant walls with a main gate flanked by two large lion statues. Many aristocrats lived in dwellings built into the walls on the side of the mountain, while other, lower-class Mycenaeans lived in the hills below.

The Mycenaeans were a sophisticated society that established many of the fundamental traditions that Classical Greece later built upon. By trading with surrounding Mediterranean city-states, they became very rich in gold. However, around 1200 BC, the Mycenaeans began to decline, either because of civil unrest or natural disasters. By 1100 BC, they had abandoned the citadel. Greece fell into a 300-year long Dark Age, in which there is no written record of their history or the people who inhabited the land.

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9. The Collapse of the Hittites in Anatolia

By 1600 BC, the Hittite Kingdom was the strongest civilization in the Near East. For centuries, Hittite kings maintained power by ruling over the copper deposits in the area. If you remember from your studies on the Bronze Age, copper was a very important metal, needed to make sharper, harder tools than the stone and bone people had been used before. Therefore, copper was a highly sought-after resource in ancient times. Once the Hittites transitioned to smelting iron around 1400 BC, they became even more powerful.

The Hittites eventually began invading neighboring territories in Anatolia, including Aleppo and Arzawa. King Mursili even led troops into Babylon. Soon after being conquered, however, these territories began to revolt. These counter-attacks resulted in the fall of the Old Kingdom, which weakened the Hittites greatly for a period of time.

Despite their losses, the Hittites maintained their power over Anatolia and modern Syria until around 1250 BC. A combination of decades-long droughts, earthquakes, and famine crippled the empire. Foreign tribes also developed new military tactics, and the Hittites could not adapt fast enough. By 1200 BC, the great Hittites had fallen to their enemies, the Phrygians.

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10. The Fall of Troy

Have you ever heard of the Trojan Horse? Or the *Iliad*? If you have, you've probably heard of the city of Troy as well. For many years, historians believed that Troy was just a mythical city. However, in the late 20th century, they found evidence that Troy had been a real city after all.

Troy was one of the most important cities of the Late Bronze Age, located in modern-day Turkey. This powerful ancient city was aligned with the Hittites. The Greeks to the west were enemies of the Trojan people, and the two civilizations often faced conflict while trading or expanding throughout the Mediterranean or Asia Minor.

Although there aren't many written records about the city before their fall, Troy has remained an important part of Western history because of a writer named Homer. He wrote two Greek epics called the *Iliad* and the *Odyssey*. In the first, Homer tells of a mythical 10-year war between a Greek king, Menelaus, and the Trojans. They went to war over the king's wife, Helen, who had been captured by Paris, a Trojan prince. After more than a decade of fighting, the Greeks built a giant wooden horse and pretended to give it to the Trojans as a sign of surrender. When the Trojans brought it inside the city walls, hundreds of Greek soldiers burst out from the center, which was hollow. According to myth, they sacked and destroyed the city. Troy collapsed as a result.

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11. The Ancient Near East: Iron I

Many historians believe that part of the reason for social upheaval in the 13th century BC was due to the decrease in the supply of copper in the region. Without copper, Hittites and other tribes in Asia Minor and the Near East could not forge bronze. Because they lacked the proper materials to make weapons and tools, they were forced to look for other resources, and after a few decades, they discovered that iron was an even stronger metal than bronze. For two hundred years, ancient kingdoms gradually shifted their metal-working practices from casting bronze to smelting iron. This is why archaeologists and historians call the first period in Anatolia the "Iron Age I of the Ancient Near East." It lasted from 1200-1000 BC.

During these two centuries, people in the Near East did not undergo many cultural changes. Civilizations lost a lot of power due to natural disasters, but socially, they still practiced the same traditions as groups of the Late Bronze Age.

12. The Ancient Near East: Iron II and the Persian Empire

Iron Age II, or the period between 1000-550 BC, marked the emergence of several new civilizations. Around 1175 BC, a group called the Sea Peoples arrived on the coast of Palestine. They began to invade the region of the Levant, and eventually split off into different kingdoms that spread throughout modern-day Israel, Jordan, Syria, and Iran. These kingdoms include the Arameans, the Phoenicians, Israel, and Assyria. Many scholars believe that the Sea Peoples were the first group to really challenge the power of the Hittites. They were probably among the warring tribes that caused the Hittites to collapse. However, there are not many written records about this time period, besides what is written in the Bible. Scholars do know that there was an important trade route leading from north to south known as the Kings' Highway, where merchants transported ceramic goods as well as iron weapons, jewelry, textiles and more.

Another very powerful civilization also emerged around the end of the Second Iron Age. They were called the Persians. Cyrus the Great founded the Persian empire in the mid 6th century BC. Under his leadership, the Persians conquered the Indus Valley, Egypt, and the Mediterranean.

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13. Ancient Egypt in the Iron Age

Although Ancient Egypt was an extremely strong civilization with a lot of control over the trade routes of the region, they never really adapted to smelting iron. While most of the Near and Middle East transitioned from bronze to iron from 1300-1000 BC, the Egyptians considered iron to be impure. They believed that it was the metal used by the evil spirit Seth, who presided over the desert in Central Africa. However, archaeologists have found several iron artifacts in the Valley of Kings as well as other tomb sites. Aside from the Beads of Gerzeh, an iron sword and battle axe with an iron blade have been found at the excavation site of Ugarit. Archaeologists also uncovered an iron dagger in Tutankhamen's tomb. These discoveries point to the broad network of trade that linked civilizations throughout prehistory. Even though Egyptians did not adopt metal-working practices like their neighboring kingdoms, they made contact with them frequently enough to bury some of their most important pharaohs with iron goods.

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14. The Indus River Valley

Ancient India was another region where iron was being produced before the beginning of the Iron Age. Scholars have found evidence of smelting iron techniques that date back to 3000 BC. For the most part, these iron items were small and used for decorative purposes, added onto bronze or copper mirrors, jewelry, and other items. Around 1800 BC, ancient people in Malhar, Dadupur, Raja Nala Ka Tila and other sites began making daggers, swords, and other weapons out of iron as well. By about 1500 BC, iron was also used to make agricultural tools and implements. At the height of the Iron Age, Indus Valley civilizations used bloomeries, or large ceramic kilns, to melt and forge iron.

People in the Indus Valley also among the first to begin using the "crucible technique." This technique required mixing charcoal, wrought iron, and glass in a crucible, or large cup, and then melting them

together. This process later helped the Indus Valley people to discover steel, which was an even harder metal than wrought iron and would be crucial to the development of modern society later on.

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15. Central and Western Europe

In Central and Western Europe, people continued to use bronze for their tools and weapons up until around 1000 BC, when traders from Asia Minor, or Caucasus, likely introduced iron to European tribes. The only area to use iron beforehand was Romania. They had begun smelting iron around 1700 BC, after finding large amounts of the metal present in their land. The next group to use iron was located in Hallstatt, Austria. They made the transition from bronze to iron around 900 BC, followed by people in Poland, who were known as the Slaves. However, the Celts were the group to really expand and conquer the Western world. They expanded from Austria all the way to the British Isles throughout the 1000s, taking the practice of smelting iron with them.

In Greece, meanwhile, the Iron Age took place between the fall of the Mycenaeans in 1100 BC and the onset of Archaic Greece, around 800 BC. These three hundred years are called both the Iron Age and the Greek Dark Ages. They ended when the inhabitants of Greek city-states established social and religious customs that formed the basis for the Classical Age. These customs included the creation of the Olympics, mathematical and physical discoveries, and the invention of democracy.

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16. The Celts of the British Isles

When you think of the Celts, you likely think of Irish and British history. However, the tribes of people known as the Celts really originated in Central Europe, where they spread out before migrating to other regions, including the British Isles. Celtic culture dates back to 1200 BC, but by the 3rd century BC, they had built large settlements in Spain, France, Ireland, Scotland, England, Wales, and other regions north of the Alps. In these regions, the Celts had different names, including the Gauls, Gaels, Britons, Galatians, and Irish. Although there were some small regional differences between tribes, these groups spoke similar languages, played musical instruments that resembled the modern-day bagpipes, and led rural lives.

The Celts were agriculturally advanced, pastoral people. They lived in stone settlements that were located close to their fields and livestock, with burial mounds and worship sites located nearby as well. They were a very religious, pagan culture, with high priests who led their ritual prayers and dances called Druids. Many historians believe the Celts were responsible for the construction of the mystical monolith worship site, Stonehenge. They were the most dominant culture of northern Europe until the Romans began attacking and eliminating them around 200 BC.

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17. The Germanic Iron Age of Scandinavia

The Iron Age of Scandinavia is split between two separate periods, the Pre-Roman Iron Age and the Roman Iron Age. Archaeologists have found iron implements and artifacts that can be traced back to

3000 BC. However, the Pre-Roman Iron Age did not begin until around 500 BC, when ancient people in Norway, Sweden, and Denmark found iron in bogs, or wet, swampy marshes, which they began melting to make tools. Still, their culture remained similar to that of the Late Bronze Age for many centuries. This period lasted until 1 BC, when the Romans invaded northern Europe. The Roman Iron Age did not end until 800 AD, when Vikings conquered Scandinavia.

Ancient people of Scandinavia adopted many Celtic traditions during the Pre-Roman Iron Age. Their lifestyle was very connected to the bogs, forests, and swamps that surrounded them. During religious rituals, they often buried weapons, tools, and even humans beneath the earth's surface, which were then preserved by the chemicals in the bog for thousands of years. They lived in longhouses with stables where they could keep cattle and other livestock, with large fields marked by cairns, or stacks of rocks, situated next to them.

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18. Sub-Saharan Africa and Southeast Asia

Like the Ancient Egyptians, tribes located in Sub-Saharan Africa probably encountered or worked with wrought iron long before the Iron Age reached those regions. However, the first people to smelt iron to forge weapons and other tools were the Nok tribe, who were settled in Nigeria. They began constructing bloomery furnaces around 550 BC. In fact, historians believe that Sub-Saharan civilizations skipped the Bronze Age altogether and instead transitioned from stone to smelted iron almost immediately. By the 3rd century BC, the Bantu tribe had adopted metal working as well, making them technologically advanced and powerful enough to conquer neighboring lands. By 300 CE, they had spread from the Cameroon region to the African Great Lakes all the way south to the Cape of Africa.

Areas in Southeast Asia were likely introduced to iron later on, in the late Iron Age. Scholars believed that regions in Thailand were overtaken by people from the Indus Valley around 300 BC.

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19. Imperial China: From the Bronze Age to the Qin Dynasty

Imperial China also has a long history with iron usage. Archaeologists have found daggers, tools, and weapons that were made from meteoric iron during the rule of the Shang Dynasty, between 1600-1100 BC. Nonetheless, the true Chinese Iron Age began half a millennium later, long after the Zhou Dynasty defeated the Shang Dynasty in 1046 BC. This was a particularly bloody period, as the Zhou were very violent toward their enemies. They sought power and dominion over all surrounding regions. Under their rule, many regions in China erupted in local conflicts. From the 5th to 3rd centuries, neighboring tribes and dynasties fought over territory and resources, earning the name "the Warring States Period" in Chinese History.

During this time, Chinese blacksmiths smelted iron using huge fire pits. They worked with a special type of smelted iron called "pig iron," which was a bit softer and easier to mold. Then, the Qin dynasty took control in 221 BC. The imperial government took special interest in the 30 iron production centers in southwest China and made very sophisticated innovations in smelting iron techniques.

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20. The End of Prehistory

As you have seen, the term “Iron Age” does not apply to one specific period of time. Instead, every region and civilization experienced their own version of this last Metal Age at a different point in history. Just as the beginning of the Iron Age varies depending on the location, the end of the Iron Age, or prehistory, does too. For example, many scholars cite that prehistory came to an end for civilizations in Greece and the Near East in 550 BC, when a historian named Herodotus began constructing and writing a history of the world. He called his volumes “The Histories” and is often referred to as the Father of History.

In Western Europe, the Iron Age lasted up until the Romans conquered the continent, expanding from modern Italy all the way to the British Isles. The Roman takeover did not take place until 400 years after Herodotus’ writing, in the 1st century BC. In Scandinavia and northern Europe, civilizations and tribes carried on their iron-smelting practices up until the Vikings rose to power around 800 AD.

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21. Technological Advancements in the Stone Age

The Iron Age was a time of great agricultural and societal innovation. In Anatolia, where iron implements were first invented, they made sickles, iron-tipped plows, chariot axles, and other equipment that could be pulled by large animals. These tools made farming a much faster, easier process, so people had extra time to work on other things, like making salt, weaving clothes, and making pottery that they could trade with other kingdoms.

In Europe and Britain, the Celts used iron to make coins, pottery wheels, helmets, and rotary querns, with which they ground wheat, barley, and rye. The Celts also designed elaborate burial sites and built large, highly productive farms. With iron tools, Celtic farmers could dig irrigation ditches for their fields as well as large bell-shaped pits to store their harvest during the winter season. Over the course of the 800 hundred years that they spread throughout Europe, these innovations became common household items.

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22. Gods, Religion, and Rituals

In Ancient times, people were very spiritual. The Hittites, Mesopotamians, Egyptians, Mycenaeans, Greeks, and Celts were all polytheistic cultures, meaning they believed in more than one god. These cultures worshiped deities that they believed were in control of the natural world, the harvest, and the circle of life and death. People also believed in an afterlife. They practiced very specific funeral and burial rites led by priests, shamans, or Celtic druids in order to ensure that the person would make it safely to life after death. In many cases, these rituals involved burying iron and bronze jewelry, armor, and weapons along with the deceased in their tombs. In Egypt, these tombs were either rectangular pits cut into the ground or large pyramids for wealthier people. In northern Europe, many people were buried in bogs, or swamps, as they believed these wetlands to be holy. They also built large mounds where multiple people were buried at once.

Because so many civilizations traded with and conquered one another, many of their gods overlapped. The Celtic gods were very similar to the Greco-Roman deities, for example. Likewise, the ancient Vedic

gods of Iran and the Indus Valley shared mythologies with Hinduism in India. Many of other mythologies also combined throughout history.

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23. Agriculture and War in the Iron Age: The Establishment of the Farming Community

People's lives in the Iron Age were very agrarian. Differentiated class systems had already emerged in certain civilizations during the Bronze Age, like those in Egypt, Greece, China, and Mesopotamia. Nonetheless, life between 1100-100 BC revolved around farming the land and preparing for the seasonal harvest. Ancient people had to plow fields, dig irrigation systems, gather crops, and develop methods for storing excess food in granaries and pits in the ground to avoid returning to the nomadic lifestyle of the Stone Age. However, they also had to protect themselves from neighboring tribes, as many Iron Age cultures attacked and pillaged other villages to assert their dominance.

As a result, most people lived in small communities on hills surrounded by large walls and ditches or moats. These hill forts were guarded by warriors, who were constantly on the lookout for approaching danger. In the Near East, most structures were made of mud to protect their inhabitants from the heat and sun. In Greece and Crete, homes, churches, and temples were made of stone or marble. In Europe, Celtic tribes constructed roundhouses made of wood, daub, and wattle, or mud mixed with hay or straw. Many settlements also included longhouses, where people would eat together and care for the livestock that lived in adjoining stables.

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24. Daily Life during the Iron Age

Although the majority of their time was devoted to farming and protecting themselves from attackers, people also spent much of their daily lives taking care of household chores or preparing food for meals. People ground grains using rotary querns, baked bread in small stone ovens, and cooked stews and meat in pots over a central fire. They also wove cloth on upright wooden weaving looms. Because of the heat and dust in the Near East and Mediterranean, people made their clothes out of light materials, like linen. They fashioned them into loose togas that allowed them to move around easily. In Europe, they used looms to weave heavy tunics, pants, belts, and shoes out of wool to keep themselves warm.

Iron Age people also had time to partake in leisure activities and craftsmanship. Whether they were making pottery, jewelry, or textiles, ancient cultures crafted beautiful pieces of art out of the materials available to them. In Greece and Minoa, they painted colorful frescos on the walls of their palaces as well. People also invented games using small glass pieces, some of which have been found in bog sites in Europe. Ancient people would gather together and play these games or talk as they ate and drank wine or beer.

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<https://www.youtube.com/watch?v=q0AIYljZKWY>

https://www.youtube.com/watch?v=AU1dKfMIEUQ&list=PLPfgy4_BqG8n3rcish27jG-WJq-uUP08a

<http://www.explorecrete.com/archaeology/minoan-civilization-destruction.html>

<https://www.nationalgeographic.com/news/2013/8/130822-ancient-egypt-beads-meteorites-iron-gerzeh/#c>
[lose](#)
<https://books.openedition.org/ifpo/5075?lang=en>
https://en.wikipedia.org/wiki/Iron_Age
<https://www.history.com/topics/ancient-greece/mycenae>
https://www.cs.mcgill.ca/~rwest/wikispeedia/wpcd/wp/i/Iron_Age.htm
<https://www.britannica.com/topic/history-of-Europe/The-Iron-Age>
<https://www.livescience.com/2339-iron-age-changed-world.html>
http://www.bbc.co.uk/history/ancient/british_prehistory/ironage_intro_01.shtml
<https://www.history.com/topics/ancient-history/celts>
<https://study.com/academy/lesson/greek-iron-age-timeline-mythology.html>
<https://www.livescience.com/2339-iron-age-changed-world.html>
<https://www.ancientcraft.co.uk/Archaeology/iron-age/ironage-tech.html>
<https://study.com/academy/lesson/the-iron-age-in-china.html>
<https://study.com/academy/lesson/greek-iron-age-timeline-mythology.html>
<https://www.britannica.com/topic/Celtic-religion/The-Celtic-gods>
<https://newsroom.posco.com/en/the-iron-age-of-civilization/>