

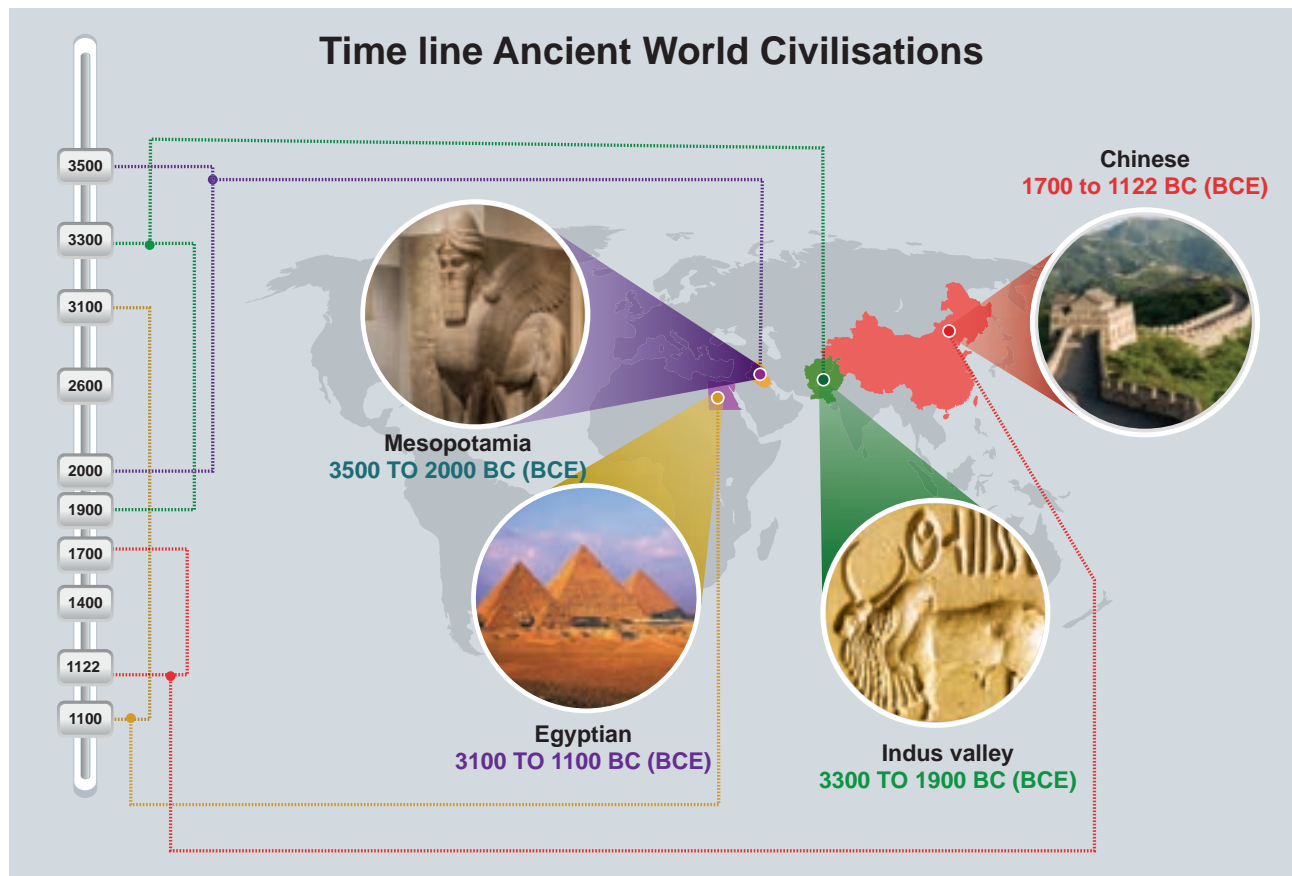
## Unit 3

### Indus Civilisation



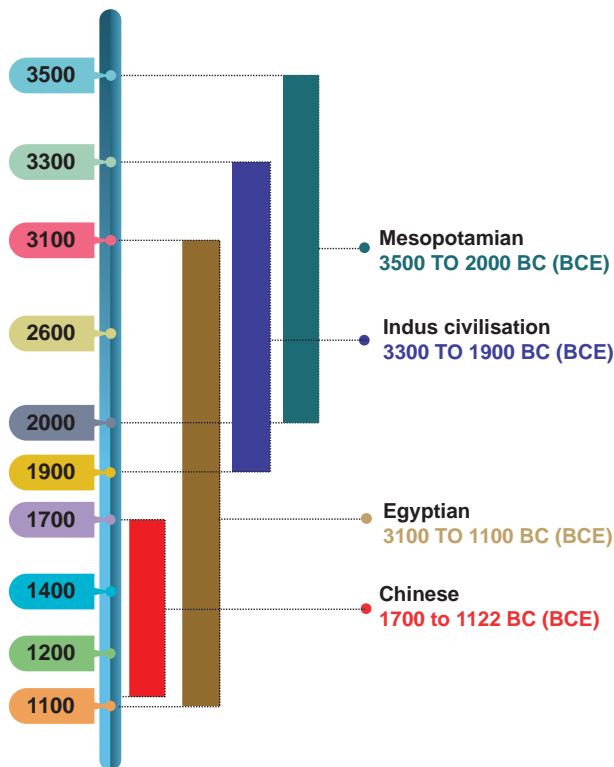
#### Learning Objectives

- To learn how Indus Civilisation is related to other contemporary civilisations
- To understand the urban nature of the Indus Civilisation
- To know the lifestyle of the people of this civilisation
- To identify and study the major sites of Indus Civilisation
- To mark their geographical location in maps



All these civilisations were established only in places near the rivers, most commonly along their banks.

### Time line



Initially, people lived in groups. Then they formed communities out of these groups. Then evolved the societies which in due course become civilisations.

### Why did people settle near rivers?

People preferred to settle near the rivers for the reasons given below.

- The soil is fertile.
- Fresh water is available for drinking, watering livestock and irrigation.
- Easy movement of people and goods is possible.

### Discovery of a lost city – Harappa

The ruins of Harappa were first described by the British East India Company soldier and explorer Charles Masson in his book. When he visited the North-West Frontier Province which is now in Pakistan, he came

across some mysterious brick mounds. He wrote that he saw a “ruined brick castle with very high walls and towers built on a hill”. This was the earliest historical record of the existence of Harappa.

In 1856 when engineers laid a railway line connecting Lahore to Karachi, they discovered more burnt bricks. Without understanding their significance, they used the bricks for laying the rail road.



**Sir John Marshall**

In the 1920s archaeologists began to excavate the cities of Harappa and Mohenjo-Daro. They unearthed the remains of these long-forgotten cities. In 1924 the Director General of ASI, Sir John Marshall, found many common features between Harappa and Mohenjo-Daro. He concluded that they were part of a large civilisation.

Some slight differences are found in the earthenwares of Harappa and Mohenjo-Daro. This made the researchers conclude that Harappa was older than Mohenjo-Daro.

### The Archaeological Survey of

**India** (ASI) was started in 1861 with Alexander Cunningham as Surveyor. Its headquarters is located in New Delhi.



## How do archaeologists explore a lost city?

- ✓ Archaeologists study the physical objects such as bricks, stones or bits of broken pottery (sherds) to ascertain the location of the city and time that it belong to.
- ✓ They search the ancient literary sources for references about the place.
- ✓ They look at aerial photographs of the excavation sites or cities to understand the topography.
- ✓ To see under the ground, they may use a magnetic scanner
- ✓ The presence and absence of archeological remains can be detected by RADAR and Remote Sensing Methods.



## Sites in Indian borders

Archaeologists found major Harappan sites within Indian borders.



Observe the picture and fill the tabular column.

Name of the place	Name of the state	Important finds



### Time Span of Indus Civilisation

Geographical range: South Asia

Period : Bronze Age

Time : 3300 to 1900

BC(BCE) (determined using the radiocarbon dating method)

Area : 13 lakh sq.km

Cities : 6 big cities

Villages : More than 200



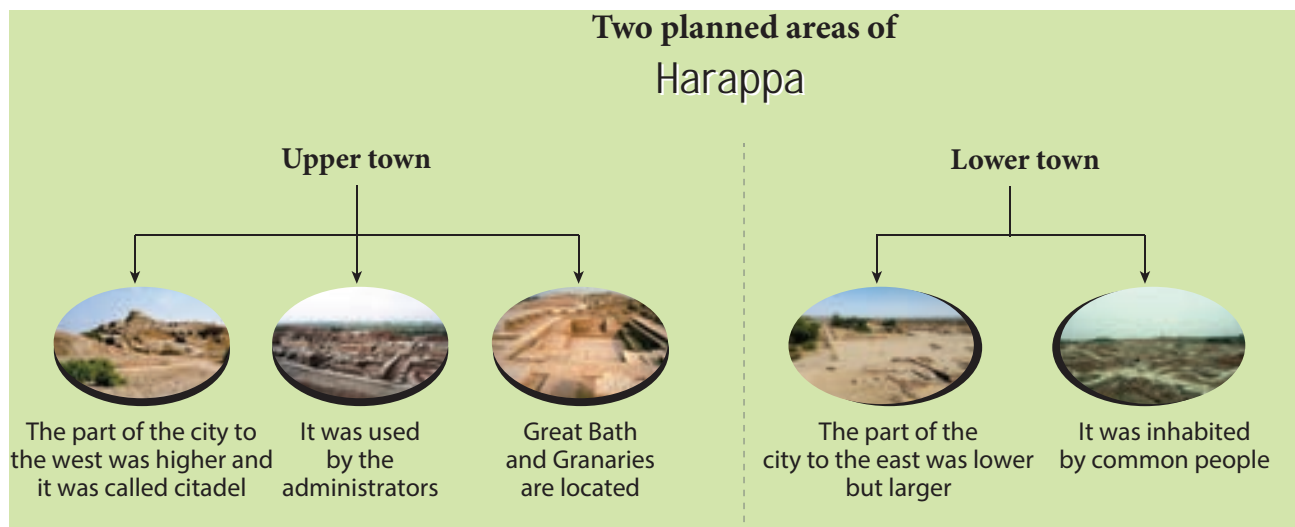
### Urban Civilisation

Harappan civilisation is said to be urban because of the following reasons.

- Well-conceived town planning
- Astonishing masonry and architecture
- Priority for hygiene and public health
- Standardised weights and measures
- Solid agricultural and artisanal base

### Unique Features of Harappan Civilisation

Town planning is a unique feature of the Indus Civilisation. The Harappan city had two planned areas.



### Mehergarh – the Precursor to Indus Civilisation

Mehergarh is a Neolithic site. It is located near the Bolan Basin of Balochistan in Pakistan. It is one of the earliest sites known. It shows evidence of farming and herding done by man in very early times. Archaeological evidence suggests that Neolithic culture existed in Mehergarh as early as 7000 BC (BCE).



## Streets and Houses



- The streets are observed to have a grid pattern. They were straight running from north to south and east to west and intersected each other at right angles.
- The roads were wide with rounded corners.
- Houses were built on both sides of the street. The houses were either one or two storeys.
- Most of the houses had many rooms, a courtyard and a well. Each house had toilets and bathrooms.
- The houses were built using baked bricks and mortar. Sun-dried bricks were also used. Most of the bricks were of uniform size. Roofs were flat.
- There is no conclusive evidence of the presence of palaces or places of worship.



### why burnt bricks are used in construction?

They are strong, hard, durable, resistant to fire and will not dissolve in water or rain.



### Info Bits

#### Bronze Age

It is a historical period characterised by the use of articles made of bronze.

### Drainage System

- Many of these cities had covered drains. The drains were covered with slabs or bricks.
- Each drain had a gentle slope so that water could flow.
- Holes were provided at regular intervals to clear the drains.



- House drains passed below many lanes before finally emptying into the main drains.
- Every house had its own soak pit, which collected all the sediments and allowed only the water to flow into the street drain.

## The Great Bath (Mohenjo-daro)



- The great bath was a large, rectangular tank in a courtyard. It may be the earliest example of a water-proof structure.
- The bath was lined with bricks, coated with plaster and made water-tight using layers of natural bitumen.
- There were steps on the north and south leading into the tank. There were rooms on three sides.
- Water was drawn from the well located in the courtyard and drained out after use.



## The Great Granary (Harappa)

- The granary was a massive building with a solid brick foundation.



- Granaries were used to store food grain.
- The remains of wheat, barley, millets, sesame and pulses have been found there.

A granary with walls made of mud bricks, which are still in a good condition, has been discovered in Rakhigarhi, a village in Haryana, belonging to Mature Harappan Phase.

## The Assembly Hall

The Assembly Hall was another huge public building at Mohenjo-Daro. It was a multi-pillared hall (20 pillars in 4 rows to support the roof).



## Trade and Transport

- Harappans were great traders.
- Standardised weights and measures were used by them. They used sticks with marks to measure length.



- They used carts with spokeless solid wheels.
- There is evidence for extensive maritime trade with Mesopotamia. Indus Seals have been found as far as Mesopotamia (Sumer) which are modern-day Iraq, Kuwait and parts of Syria.
- King Naram-Sin of Akkadian Empire (Sumerian) bought jewellery from the land of Melukha (a region of the Indus Valley) was mentioned in an epic regarding Naram-Sin.
- Cylindrical seals similar to those found in Persian Gulf and Mesopotamia have also been found in the Indus area. This shows the trade links between these two areas.

A naval dockyard has been discovered in Lothal in Gujarat. It shows the maritime activities of the Indus people.

### Dockyard at Lothal

Lothal is situated on the banks of a tributary of Sabarmati river in Gujarat.



### Leader in Mohenjo-Daro

- A sculpture of a seated male has been unearthed in a building, with a head band on the forehead and a smaller ornament on the right upper arm.
- His hair is carefully combed, and beard finely trimmed.
- Two holes beneath the ears suggest that the head ornament might have been attached till the ear.
- The left shoulder is covered with a shawl-like garment decorated with designs of flowers and rings.
- This shawl pattern is used by people even today in those areas.



### Technology

- Indus people had developed a system of standardised weights and measures.
- Ivory scale found in Lothal in Gujarat is 1704mm (the smallest division ever recorded on a scale of other contemporary civilisations).



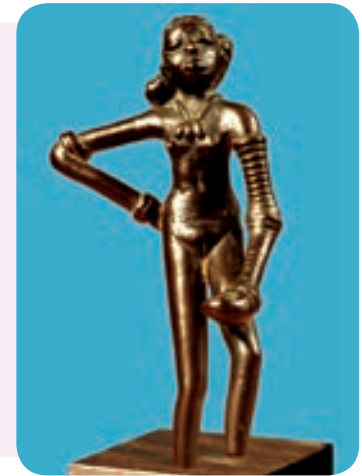
#### Info Bits

The word 'civilisation' comes from the ancient Latin word civis, which means 'city'.





This little statue was found at Mohenjo-Daro. When Sir John Marshall saw the statuette known as the dancing girl, he said, "When I first saw them I found it difficult to believe that they were pre-historic modeling. Such as this was unknown in the ancient worlds up to the age of Greece. I thought that these figures had found their way into levels some 3000 years old to which they properly belonged".



KVT Complex (Korkai-Vanji-Thondi) spread over Afghanistan and Pakistan has many places, names of those were mentioned in sangam literature.

Korkai, Vanji, Tondi, Matrai, Urai and Kudalgarh are the names of places in Pakistan.

Gurkay and Pumpuhar in Afghanistan are related to the cities and ports mentioned in the Sangam Age. The names of the rivers Kawri and Poruns in Afghanistan and the rivers Kaweri Wala and Phornai in Pakistan also occur in the Sangam literature.





## Do you know The hidden treasures of the Indus civilisation



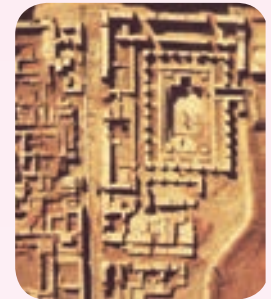
Inscriptions (written in a script of those times) can provide us information about customs, practices and other aspects of any place or time. So far, the Indus script has not been deciphered. Therefore, we must look for other clues to know about the Indus people and their lifestyle.

### Apparel

- ◆ Cotton fabrics were in common use.
- ◆ Clay spindles unearthed suggest that yarn was spun.
- ◆ Wool was also used.

### Love and peace

- ◆ Settlements were built on giant platforms and elevated grounds.
- ◆ The Indus Civilisation seems to have been a peaceful one. Few weapons were found and there is no evidence of an army.
- ◆ They displayed their status with garments and precious jewellery.
- ◆ They had an advanced civic sense.



### Ornaments

- ◆ Ornaments were popular among men and women.
- ◆ They adorned themselves with necklaces, armlets, bangles, finger rings, ear studs and anklets.
- ◆ The ornaments were made of gold, silver, ivory, shell, copper, terracotta and precious stones.



Horse and iron were unknown to the people of Indus.



Indus people used the red quartz stone called Carnelian to design jewellery.

### Info Bits

Copper was the first metal discovered and used by humans.

## Who Governed them?

Historians believe that there existed a central authority that controlled planning of towns and overseas trade, maintenance of drainage and peace in the city.



## Occupation

- ◆ The main occupation of the Indus Civilisation people is not known. However, agriculture, handicrafts, pottery making, jewellery making, weaving, carpentry and trading were practiced.
- ◆ There were merchants, traders and artisans.
- ◆ Rearing of cattle was another occupation.
- ◆ People of those times knew how to use the potter's wheel.
- ◆ They reared domesticated animals.

## Pottery

- ◆ Pottery was practiced using the potter's wheel. It was well fired. Potteries were red in colour with beautiful designs in black.
- ◆ The broken pieces of pottery have animal figures and geometric designs on it.



## Religious Belief

We don't have any evidence pointing to specific deities or their religious practices. There might have been worship of Mother Goddess (which symbolized fertility), which is concluded based upon the excavation of several female figurines.

## Toy Culture

Toys like carts, cows with movable heads and limbs, clay balls, tiny doll, a small clay monkey, terracotta squirrels eating a nut, clay dogs and male dancer have been found.

They made various types of toys using terracotta, which show that they enjoyed playing.



### Info Bits

The earliest form of writing was developed by Sumerians.

### What happened to Harappans?

By 1900 BCE, the Harappan culture had started declining. It is assumed that the civilisation met with

- repeated floods
- ecological changes
- invasions
- natural calamity
- climatic changes
- deforestation
- an epidemic



Archaeological site at Mohenjo-Daro has been declared as a World Heritage Site by UNESCO.



### Radiocarbon Dating Method: A Standard Tool for Archaeologists

Also known as  $C_{14}$  method, the radiocarbon method uses the radioactive isotope of carbon called carbon<sub>14</sub> to determine the age of an object.

### General Facts about Indus Civilisation

- It is among the oldest in the world.
- It is also the largest among four ancient civilisations.
- The world's first planned cities are found in this civilisation.
- The Indus also had advanced sanitation and drainage system.
- There was a high sense of awareness on public health.



## Summary

- ❖ When man began to live in a settled life, it marked the dawn of civilisation.
- ❖ River valleys were responsible for the growth of civilisation.
- ❖ Harappan culture was mainly urban in nature.
- ❖ Cities were well planned with covered drainage and straight wide roads, cutting each other at right angles.
- ❖ The people of that time had great engineering skills.
- ❖ The Great Bath is one of the earliest public tank.
- ❖ The civilisation extended from:
  - Makran coast of Baluchistan in the west
  - Ghaggar-Hakra river valley in the east
  - Afghanistan in the north east
  - Maharashtra in the south

## GLOSSARY

1	Archaeologist	–	one who studies the remains of the past by excavations and exploration
2	Excavate	–	to uncover by digging away
3	Urbanisation	–	population shift from rural areas to urban areas
4	Pictograph	–	a record consisting of pictorial symbols
5	Steatite	–	a soft variety of talc stone
6	Spindles	–	a device used to spin clothes
7	Bitumen	–	water-proof tar
8	Artefact	–	an object shaped by human craft of historical interest
9	Dockyard	–	an enclosed area of water in a port for loading, unloading and repair of ships
10	Seal	–	an embossed emblem, figure or symbol

## Elsewhere in the World



**The Great Pyramid of Giza** built by king Khufu in 2500 BCE, built with lime stone



Mesopotamia (Sumerian period) **Ur Ziggurat** built by king Ur Nammu in Honour of the Moon God Sin



**Abu Simbel** Site of two temples built by Egyptian king Ramises II

### Exercises

#### I. Choose the correct answer



- What metals were known to the people of Indus Civilization?
  - Copper, bronze, silver, gold, but not iron
  - Copper, silver, iron, but not bronze
  - Copper, gold, iron, but not silver
  - Copper, silver, iron, but not gold
- Indus Civilisation belonged to
  - old Stone age
  - Medieval stone age
  - New stone age
  - Metal age
- River valleys are said to be the cradle of civilisation because
  - Soil is very fertile.
  - They experience good climate.
  - They are useful for transportation.
  - Many civilisations flourished on river valleys.

#### II. Match the Statement with the Reason. Tick the appropriate answer

- Statement:** Harappan civilization is said to be an urban civilization.  
**Reason:** It has well planned cities with advanced drainage system.
  - Statement and reason are correct.
  - Statement is wrong.
  - Statement is true, but the reason is wrong.
  - Both statement and reason are wrong.
- Statement:** Harappan civilization belongs to Bronze Age.  
**Reason:** Harappans did not know the use of iron.
  - Statement and reason are correct.
  - Statement is wrong.
  - Statement is correct, but the reason is wrong.
  - Both statement and reason are wrong.

3. **Statement:** The engineering skill of Harappans was remarkable.

**Reason:** Building of docks after a careful study of tides, waves and currents.

- Statement and reason are correct.
  - Statement is wrong.
  - Statement is correct, but the reason is wrong.
  - Both statement and reason are wrong.
4. Which of the following statements about Mohenjo-Daro is correct?
- Gold ornaments were unknown.
  - Houses were made of burnt bricks.
  - Implements were made of iron.
  - Great Bath was made water tight with the layers of natural bitumen
5. Consider the following statements.
- Uniformity in layout of town, streets, and brick sizes
  - An elaborate and well laid out drainage system
  - Granaries constituted an important part of Harappan Cities
- Which of the above statements are correct?
- 1&2
  - 1&3
  - 2&3
  - all the three
6. Circle the odd one
- Oxen, sheep, buffaloes, pigs, horses
7. Find out the wrong pair
- ASI – John Marshall
  - Citadel – Granaries
  - Lothal – dockyard
  - Harappan civilisation – River Cauvery

### III. Fill in the Blanks

- \_\_\_\_\_ is the oldest civilisation.
- Archaeological Survey of India was founded by \_\_\_\_\_.
- \_\_\_\_\_ were used to store grains.
- Group of people form \_\_\_\_\_.

### IV. State True or False

- Mehergarh is a Neolithic site.
- Archaeological survey of India is responsible for preservation of cultural monuments in the country.
- Granaries were used to store grains.
- The earliest form of writings was developed by Chinese.

### V. Match the following

Mohenjo-Daro	- raised platform
Bronze	- red quartz stone
Citadel	- alloy
Carnelian	- mound of dead

### VI. Answer in one or two sentences

- What are the uses of metal?
- Make a list of baked and raw foods that we eat.
- Do we have the practice of worshipping animals and trees?
- River valleys are cradles of civilisation. Why?
- Just because a toy moves doesn't mean its modern. What did they use instead of batteries?
- Dog was the first animal to be tamed. Why?
- If you were an archaeologist, what will you do?
- Name any two Indus sites located in the Indian border.





### Top to Bottom

1. Director General of ASI.
2. \_\_\_\_\_ is older than Mohenjo-Daro.
3. This is \_\_\_\_\_ age civilisation.
4. Each house had a \_\_\_\_\_.

### Left to Right

5. Place used to store grains.
6. A dockyard has been found.
7. \_\_\_\_\_ is unknown to Indus people.
8. It is used to make water tight.

### Right to Left

9. From this we can get lot of information.
10. This is responsible for research.

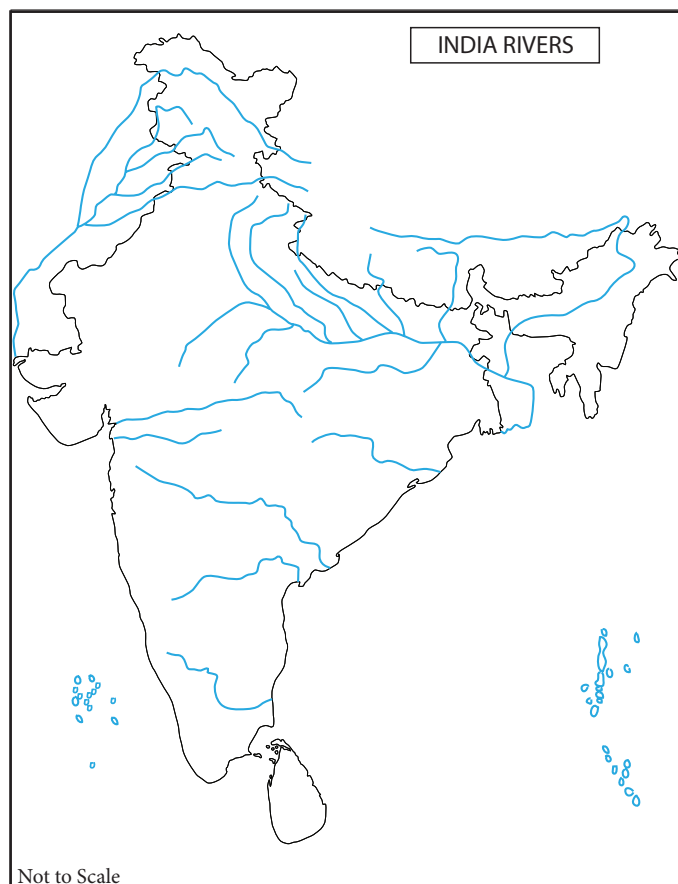
### Rapid Fire Quiz (Do it in groups)

1. Which crop did Indus people use to make clothes?

2. Which was the first Indus city discovered?
3. Where was Indus Civilisation?
4. Which animal was used to pull carts?
5. Which metal was unknown to Indus people?
6. What was used to make pots?
7. Which is considered the largest civilisation among four ancient civilisations of the world?

### X. Life skill

1. Making an animal or a pot out of clay.
2. Making terracotta toy with movable limbs.
3. Pot painting (with geometric pattern).
4. Make informational charts and posters.



### XI. Map Work

1. Mark any four Indus sites located within the Indian border.
2. On the river map of India, colour the places where Indus civilisation spread.
3. Mark the following places in the given India map:
  - a. Mohenjo-Daro
  - b. Chanhudaro
  - c. Harappa
  - d. Mehargarh
  - e. Lothal

## XII. Answer Grid

What did Charles Masson see? <b>Ans:</b>	List three things people used which we use today? <b>Ans:</b>	What else has been found? <b>Ans:</b>
Can you say three things unknown to Indus people? <b>Ans:</b>	Which metal was unknown to Indus people? <b>Ans:</b>	Which is the oldest civilisation in the world? <b>Ans:</b>
Why dog was the first animal to be tamed? <b>Ans:</b>	Who were the first people to grow cotton? <b>Ans:</b>	Which institution is responsible for archaeological research? <b>Ans:</b>
Was there any river valley civilisation found in TamilNadu? <b>Ans:</b>	Name any two Harappan sites which were found in Indian border? <b>Ans:</b>	Can we say the Indus cities as cities of children? <b>Ans:</b>



## Internet Resources

1. <http://www.thenagain.info/webchron/india/harappa.html>
2. <http://www.archaeologyonline.net/artifact/harappa-mohenjodaro.html>
3. <http://en.m.wikipedia.org>
4. [www.harappa.com](http://www.harappa.com)

