

Indus Valley

Indus Valley Technology and Trade



Introduction to Indus Valley Civilization

Indus Valley Culture

Indus Valley Technology and Trade

Indus Valley Cities

Thematic Icons



Economics



Geography



Historical concepts



Government

Icons



Flash activity (these activities are not editable)



Teacher notes included in the Notes page

For more instructions, see the *User Guide*.



The Indus Valley Civilization was an extremely innovative and creative society.

Scientific development was a key aspect of this innovation.

The Indus people worked to improve many aspects of their social and working life.



The Indus society created its own system of **mathematics**, weights and measures, **calendars** and even attempted early medicine and **dentistry**.





Like many other ancient civilizations, the Indus Valley people recognized the importance of the stars and their position in the sky at different times of the year.

Farmers used the position of constellations and the moon and sun to plan the planting and harvesting of crops.



Based on their observations of the Moon, the Indus society created a **lunar calendar** for the year.





The Indus Valley Civilization was among the first to develop a sophisticated **measurement system** of uniform weights and measures.

These measures were incredibly precise. Indus engineers used decimal division to measure both length and mass for all of their tasks.



The smallest division used, found on an ivory scale, was 1.704mm (millimeters). This was the smallest division ever seen in the **Bronze Age!**



The cities of the Indus Valley Civilization show the mathematical and scientific skill of the Indus people.

Engineers of the Indus Valley used **precise** measuring techniques to create intricate, precisely built cities.



Each city was built from the ground up using a detailed grid system. This design criss-crossed perfectly straight roads to create organized city blocks.





From studying the remains of various Indus people, archaeologists have discovered that the civilization had knowledge of **medicine** and **dentistry**.



Whilst cleaning the teeth of one of the skeletons of two men from the Indus Valley in 2001, archaeologists found evidence of medicinal drilling into several teeth.

This shows that the Indus Valley people were some of the earliest humans to practice dentistry.





In the cities of Harappa and Mohenjo-daro, archaeologists have discovered over 3,500 small stone artifacts.

These small objects are called **Indus Seals**. Each seal has been carved into **steatite** (a soft stone) and baked to make them strong and durable.

Seals were usually square, with a line of **Indus Script** at the top and an animal in the centre.



Various animals are depicted, such as elephants, bulls and a mystical creature that looks like a unicorn.





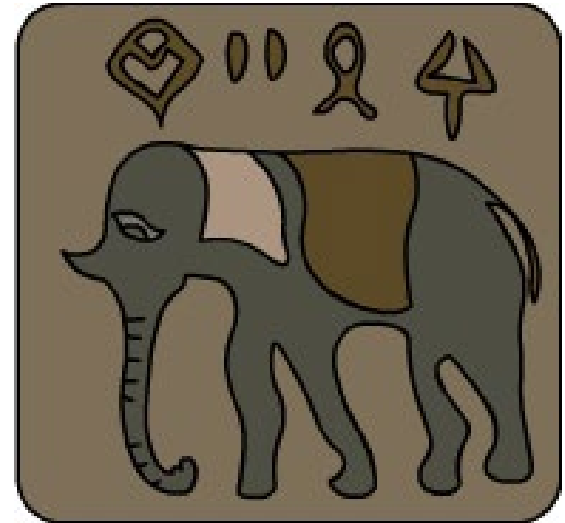
Indus Valley seals and trade



It is widely believed by archaeologists that the seals found in the Indus Valley were used as stamps during trade.

The seals would be pressed into soft clay by traders to create unique labels in order to easily mark the goods sold.

What are the differences you can spot on the three seals below? What do you think the differences would mean?





The script imprinted on the seals and other Indus Valley artefacts has not yet been successfully deciphered.

What is known about Indus Script?

- There were slightly over 400 basic symbols used.
- The script was generally written from right to left.



Why is it difficult to decipher?

- All inscriptions discovered so far are too short.
- There is no similar writing system to compare it to.
- The wider language that the script represents is unknown.





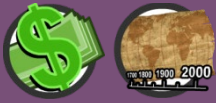
The Indus people hunted and farmed to feed themselves. However, their economy also relied heavily on the goods they created and traded.

Vast quantities of items were created in the cities, before being transported and sold by tradesmen throughout the Indus Valley region.



Indus goods ranged from terracotta pots to gold, silver and colored semi-precious gemstone jewelry.





The transport of trade



Archaeologists believe the Indus Valley tradesmen utilized several advances in transport technology.

What kinds of transport do you think the Indus people used? Consider the geography and technological development of the Indus Valley.

Wheeled carts pulled by cattle, almost identical to those used today in modern India and Pakistan, were used by traders.



Flat-bottomed **sail boats** were extensively used to easily transport goods up and down the Indus River.





As well as trading within the valley region, the Indus Valley Civilization and its culture reached many other lands.

Most Indus boats were small for travel on the river. However, there is evidence to suggest the civilization also built large ships for travelling on the ocean.



Archaeologists have discovered a huge man-made canal in the coastal city of Lothal that may be an ancient Indus port.

Indus artifacts have been discovered in areas of northern and western India, Afghanistan and **Mesopotamia**.



Indus trade map



What helped Indus farmers know when it was the right time to plant crops?

the wind

the moon and stars ✓

the ocean tide

What was the main, defining feature of Indus Grid Pattern city design?

perfectly straight, wide roads ✓

narrow, winding roads

Which two creatures were featured on Indus Seals?

elephant ✓

rabbit

unicorn ✓

What type of river transport did Indus people use?

large, oared boat

jet ski

flat-bottomed sail boat ✓

