

VIKING VOYAGERS



TEACHERS

NOTES

Background information summarised
from the National Maritime Museum
Cornwall's *Viking Voyagers* exhibition



Teachers notes

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Additional learning resources on our website.
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1. WARRIORS OF THE SEA

Warriors of the sea

A Viking army's most terrifying weapon was its dragon-headed ship. The sight of a square-sailed, long and slender warship was enough to strike fear into their enemies.

On the battlefield Viking warriors were no better fighters than their opponents, whether Irish, Saxon or Arab. But aboard their legendary ships they were stealthier, faster and more deadly than their opponents.

With sails lowered, they were nearly invisible on approach giving the raiders and conquerors the advantage of surprise.



The Sea Stallion, a reconstruction of the warship Skuldelev 2. This great warship was rigged with over 2 km of cordage. She carried an enormous sail, estimated to be 112 m² and woven with some 200 kg of wool or flax.



Shock and oar

Viking warriors were highly disciplined rowers of enormous strength and stamina. Powered by up to 100 rowers, warships were capable of speeds of up to 17 knots (19.5mph).

This meant a Viking army was highly manoeuvrable so they could attack and withdraw quickly with booty and captives in all seasons and along any coasts or rivers from the Atlantic to the Caspian Seas.

1. WARRIORS OF THE SEA



What! No horns?

The stereotype of a Viking warrior crowned with a horned helmet began some time in the 9th century.

A prey to Pagan peoples

Poorly defended churches and monasteries that were accessible by sea such as Lindisfarne in Northumbria, Iona in Scotland and Inchpatrick off the Irish coast were rich in gold and silver so they became easy targets from which Viking raiders could take away vast moveable wealth.



© English Heritage

This carved stone was found on Lindisfarne. It may well depict the Viking warriors who destroyed the famous monastery there in 793.

The often merciless attitude shown to churchmen who got in the way earned the Viking warrior a notorious reputation for brutality. The monks who survived wrote the first histories of the Viking atrocities they witnessed. As God-fearing Christians they presented the Viking raiders as barbarian pagans.

Warrior class

Becoming a Viking meant going on an adventure by sea to win wealth, fame and power. Any free man could become a warrior but the expense of buying high-quality weapons and armour meant that the warrior class was mainly formed of men from rich families who had their own codes of honour.

Two hundred years after the Viking Age, Norse storytellers began to write down the stories of these warriors in the Sagas, making heroes of their ancestors, dramatising their ferocious deeds, and embellishing their exploits. The violent marauder still dominates our vision of the Viking warrior today.

Key learning points

1. The Vikings were skilled sailors and navigators. Their most dangerous weapon was their long ship which they used as fast and agile troop carriers.
2. If there was no wind, the Viking warriors would row their ships which allowed them to travel around coasts and up rivers.
3. Any free man could become a warrior but he would have to buy his own armour and weapons.

2. LIFE ON THE WAVES

Life on board ship had few creature comforts. Viking sailors endured hardship in the hope of rewards to come.

Basic Rations

In an age before canned food and refrigeration the sailor's diet on board was limited. Their usual meal was buttery porridge. This might have been bulked out with smoked, salted or dried meat or fish, or dried root vegetables. Porridge was practical, because the whole crew could be fed from a single large pot cooked over a small flame. Vikings fished with nets and lines and fresh fish would have been a welcome boost to supplies. When warships came ashore, warriors were entitled by Norwegian law to seize cattle or other livestock for *strandhogg* (beach butchery) but had to leave the head, hooves and skin so that the owner could reclaim payment from the king.

The Journeyman Cook

According to *Eybyggja Saga*, crew members drew lots every day to decide who would prepare the food. Later in the 11th century the role of cook was usually given to one man, who was paid for his work. Written sources mention the “journeyman cook” more often as a member of the crew on both warships and trading ships.

Bedding Down

With no cabin or bunks, Viking sailors relied on little more than their woollen cloaks and blankets to keep comfortable and dry. Skin sleeping bags would have been a prize possession among crew. On a merchant ship, crew may have nestled among their cargo for a nap, but a warship offered scant space or comfort for its resting warriors to stretch out between shifts.



2. LIFE ON THE WAVES

Thirsty Work

A supply of drinking water was essential during a sea voyage. It was brought on board in barrels or troughs. In the Norwegian ship graves of Oseberg and Gokstad large water troughs were found that could hold 500 litres and 750 litres respectively. Sailors also drank ale and mead (an alcoholic drink made from honey) stored in barrels which would have kept fresher than water.

Livestock such as sheep and horses were regularly taken on board ship. Vikings introduced horses to Iceland, and the Icelandic breeds today (pictured) are very close to their Viking ancestors. Although quite small, they are strong and hardy and capable of carrying heavy loads, even a fully armoured Viking warrior.



Did you sleep well?

In the Viking period most people slept sitting up rather than lying down, but this is not easy on a rolling ship. Sailors probably had to wedge themselves in or sleep lying in the hull.

Key learning points

1. Vikings brought fresh fruit and nuts as well as salted meat and fish to eat on board their ships.
2. The most common meal was porridge because it was easy to cook, needing only a single large pot and a small flame.
3. Fresh fish could be caught while at sea with nets and lines.
4. Without such luxuries as cabins or beds, Viking sailors would have little more than their woollen cloaks and blankets to keep them warm and dry.

3. From Faerings to Fighting Ships

The Vikings built a wide range of boats and ships, all of which were cleverly adapted to different uses and conditions.

Boat design evolved during the Viking Age. Early boats were relatively small craft built for general use, such as the replica faering on display in the exhibition. Over decades and centuries Viking shipbuilders gradually refined their designs, developing larger and more specialised craft including cargo ships and warships.

No Plans

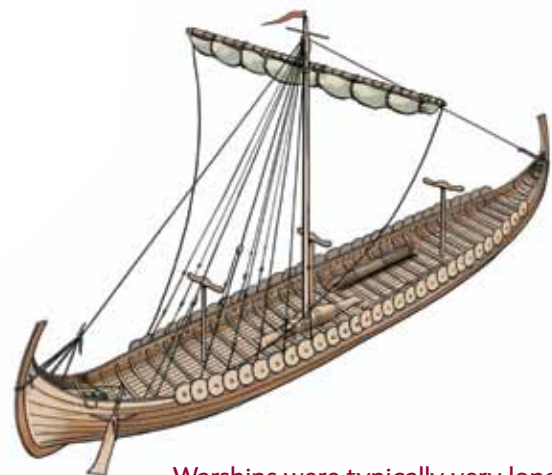
Our understanding of Viking ships was revolutionised when three cargo vessels and two warships (the Skuldelev ships) were excavated in the Roskilde Fjord in Denmark in 1962. However, there are no surviving descriptions of how Viking ships were designed. Perhaps plans or pre-shaped templates were used. Alternatively, shipbuilders may just have relied on their own knowledge, judgement by eye, and basic measuring tools.



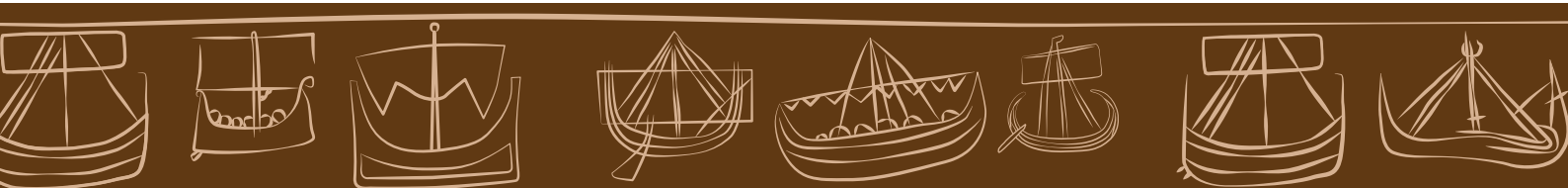
Small fishing boats were light and nimble but shared the same construction techniques as even the largest Viking ships.



Cargo vessels were relatively wide for stability and capacity, rather than speed. The trading ship Skuldelev 1 was 16.5m long and 4.5m wide.



Warships were typically very long and slender. Roskilde 6, the largest known Viking warship, was over 37m long but just 4m wide, with space for up to 80 oarsmen.

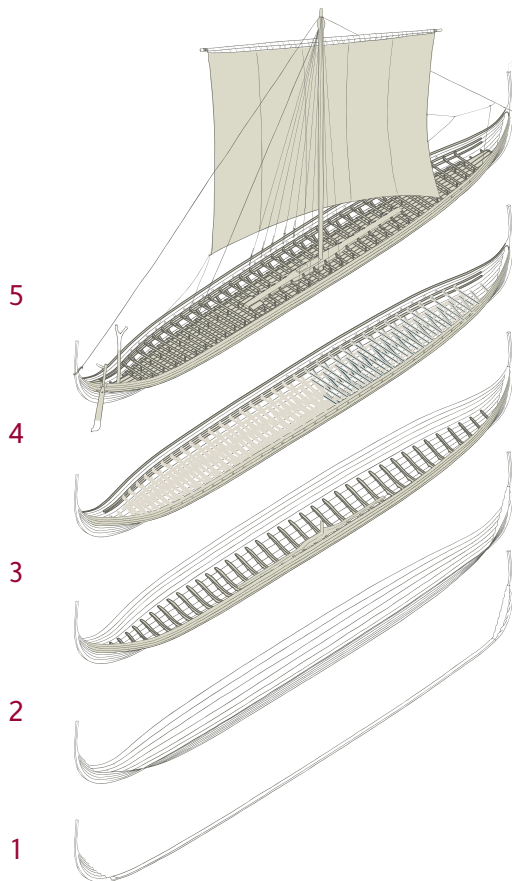


3. From Faerings to Fighting Ships

The Stem Smith

A crucial part of any Viking boat was the construction of the stems at either end, since it dictated the size and shape of the finished vessel. The stafnasmithr (stem smith) was an important man in any boatbuilding project. Overlapping strakes, or planks, were then riveted in place, working upwards and outwards from the stems and the keel. Internal frames were added at right angles to the keel to help the hull keep its shape. At the time this clinker-built technique was unique. Viking boats were lightweight and strong. Their shallow draught enabled them to navigate far upriver and made them easy to land and launch – ideal for both trading and raiding.

© Trustees of the British Museum



Key learning points

1. The Vikings built boats and ships of different shapes and sizes depending on their purpose.s.
2. All Viking vessels, from little rowing boats to large cargo ships and troop carriers, were built in the same way, using stem posts, a keel and clinker construction.
3. The 'clinker' technique of overlapping thin lengths of wood (strakes) meant that the ships were light and shallow, allowing them to travel up rivers and even be carried short distances.
4. The keel of the boat was very important to the boats strength, acting like a spine and providing structural rigidity.
5. There are no surviving boat plans. Shipbuilders probably used their own knowledge and judgement, passing on their skill by word of mouth.

The key stages of construction of a Viking ship, based on the warship Skuldelev 2.

1. Carefully shaped stems are fastened to each end of the keel.
2. The lower strakes (planks) are built up to either side of the keel and stems.
3. Floor timbers are fastened across the lower strakes to support the shape of the lower hull. The keelson is placed onto the keel, ready to hold the mast, then the upper strakes are added.
4. Stringers are added for support along the length of the hull. Ribs and knees support each side, while crossbeams known as bites and the thwarts (rowing benches) above them lock the sides together.
5. The mast partner and deck boards are fitted. The steering oar is added on the right-hand side of the stern. The mast, yard and sail are stepped and rigged.

4. Cargo, Trading and Camps

Markets were the high streets and shopping malls of the Viking Age. The Vikings used their ships to transport goods from their homelands and could quickly set up temporary beach and river camp markets to sell their wares, creating a great maritime trading network that encircled the coasts of Europe.

The Viking homelands had been trading with their neighbours around the North Sea and the Baltic Sea long before the raiding started. Viking merchants regularly visited well-established international emporiums such as Dorestad in the Netherlands to buy and sell. The shallow draft of Viking cargo ships meant that they could easily be beached and re-floated. Markets could be established anywhere with an accessible beach. This also enabled Viking merchants to avoid paying customs duties and tolls to the local ruler.

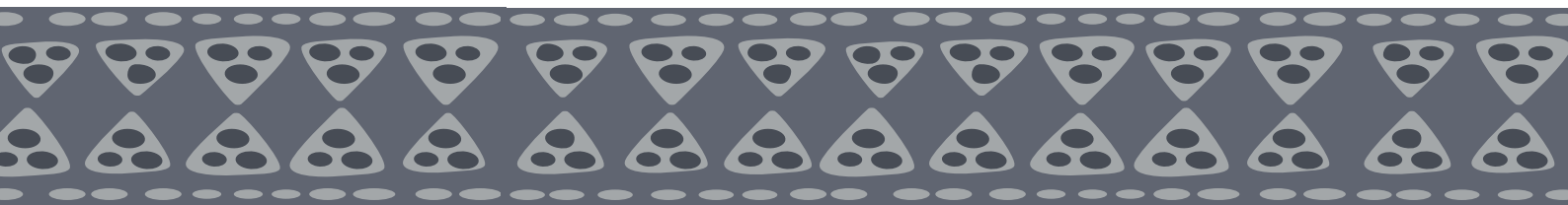
Archaeological evidence has shown that some of the camps were frequented and became fortified, not just for military need but also to protect commercial activity. Dublin began as one of these fortified ship camps and market centres, that Irish writers called longphuirt.

Sorry no Change

The Vikings had no equivalent of small change to make their daily purchases for food, clothing and shelter we regard as normal today. Coins were cut in half and quarters to create small change. Hacksilver – pieces of silver cut from jewellery – were weighed on balance scales to calculate payment. For cheap purchases it was more usual to exchange services or other goods. Furs, cloth, dried fish, grain, beads and even shells were used as forms of money.



© Frank Bradford



4. Cargo, Trading and Camps

Cargoes and Goods

While Viking raiders sought great wealth from sea-borne guerrilla attacks on monasteries, towns and villages, Viking traders found that their broad and shallow cargo ships could carry a range of merchandise from their Baltic homelands to the Mediterranean Sea.

Viking merchant adventurers took advantage of a growing maritime trading network to introduce exotic goods from their Arctic homelands to markets abroad, such as furs, whalebone, amber and walrus ivory.

In exchange, they bought items which were little-known in Viking homelands, such as linen from Ireland, jet from northern England, silk from the eastern Mediterranean, rock crystal and glass originating in Egypt and Persia, and even spices from India.

These goods were rarely traded directly but exchanged hands and shipments many times, the price being inflated the further the item travelled.



Key learning points

1. Vikings used their ships to transport goods from their homelands such as furs, whalebone, amber and walrus ivory
2. Beach and river camp markets were set up to sell their wares or trade them for exotic items such as linen from Ireland, silk from the eastern Mediterranean, and even spices from India
3. Viking traders would often barter (swap) their goods for other goods.
4. Silver was a valuable commodity. The early traders cared only about the weight of the silver, melting down coins to make bullion.
5. By the end of the Viking age, many Viking rulers were making their own coins that were used similarly to how we use money today.

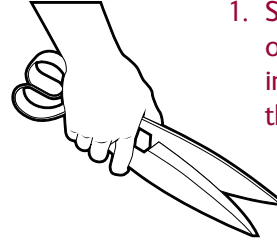
5. Women and Wool

An enormous quantity of cloth was produced and consumed by the Vikings, for clothing, sails, blankets, bags and tents. These fabrics were made by hand from plant and animal fibres. Wool was the most important cloth to the Vikings, being durable and naturally water resistant. Women produced most of the cloth in the Viking Age.

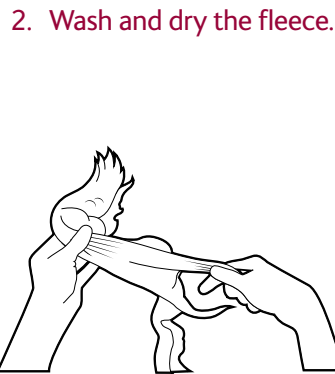
Viking settlers brought sheep to their new homelands in Iceland and Greenland by ship and their descendants are still used in those countries for meat and wool today. Woollen textile production was hugely labour intensive and required a range of skills and a lot of concentration. The sheep were bred to produce good-quality wool before they were sheared and the fleece spun into yarn of different weights and strength.

The yarn was then ready to be dyed different colours, before being woven into cloth and sewn into garments and sails. A most intriguing stage of cloth making was spinning yarn on a spindle and spindle whorl – a traditional process that was in use 8000 years before the Vikings and that is still practised all over the world today. An experienced Viking spinner could produce over 4500 metres of wool per day.

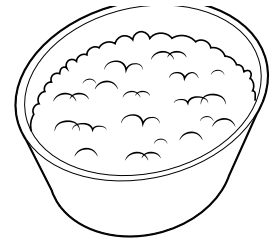
Getting into a Spin



1. Shear sheep with shearing blades or pluck by hand during moulting in spring. Fine wool for soft cloth, thick wool for coarse cloth.

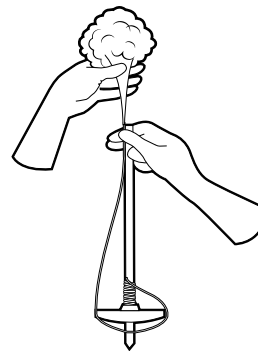
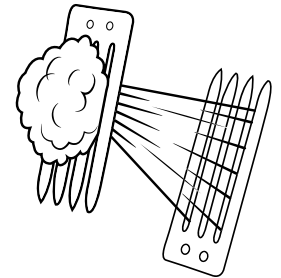


2. Wash and dry the fleece.



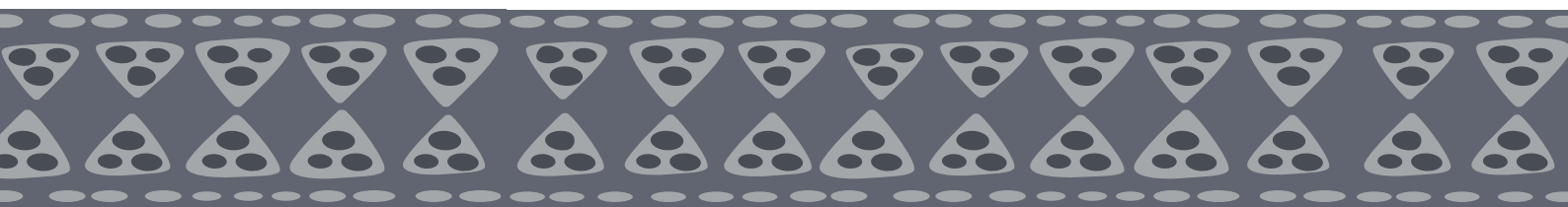
3. Tease by hand to untangle and fluff up the fibres.

4. Comb the fleece using wool combs with long teeth or spikes to make fibres long and straight.



5. Wind fibres around a pole called a distaff held vertically and draw down onto a long, thin spindle weighted down with a spindle whorl.

6. The spindle whorl acts like a fly-wheel and is shaped to spin clockwise or anti-clockwise to produce yarns with different twists for the vertical (warp) and horizontal (weft) yarns ready for the loom.



5. Women and Wool

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Viking colours

Recent scientific analysis by the Moesgård Museum in Denmark of pollen found in a Viking dyer's workshop suggest that a variety of plants were used to colour yarn and cloth:

- Chicory - black
- Heather - green and brown
- Flax dodder - red
- Goosefoot root - yellow
- Goosefoot nettle leaves - olive green

© Paul Atkin



Key learning points

1. Cloth, used for clothing, sails, blankets, bags and tents, was made by hand from plant and animal fibres.
2. Making cloth was a vital and highly prized skill.
3. No material was thrown away because you would be throwing away hours of hard work.
4. Wool contains a natural wax called lanolin that serves as an effective waterproofing.
5. Colour was a demonstration of wealth. To achieve rich, deep colours, the cloth would need to be dyed numerous times which was an expensive process.