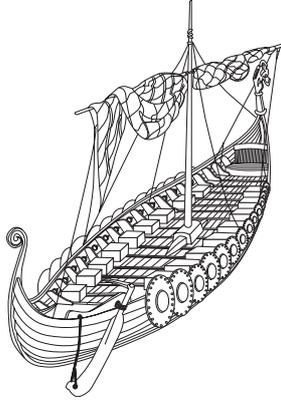
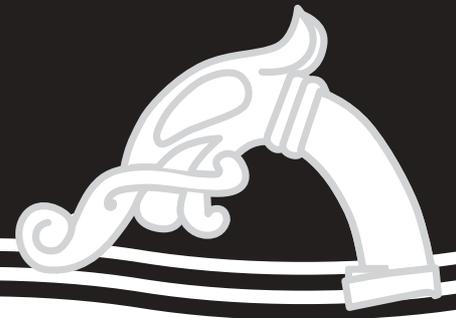




Viking ships



The longship

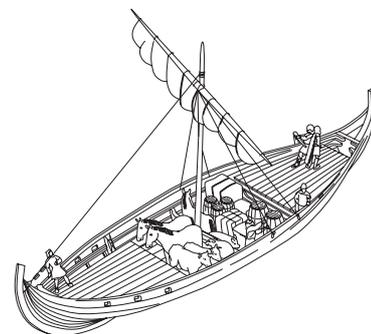
- The longship was designed for raiding and to a lesser extent for sea battles. As the name suggests it was long and narrow. This shape meant that it could travel quickly, important in surprise attacks and get-aways.
- In order to be independent of wind direction the main source of power was the oar and there were oars all along the ship. The crew were all seamen and soldiers alike. Evidence suggests that oarsmen would sit on chests or boxes.
- The longest example found was 28m long and 4.5m wide. It is thought that on large ships there would have been a crew of approximately 60 men, with one man to each oar. On long journeys they would need to change crews.
- Sails would have been furled up but masts left standing, in case they were needed suddenly.
- The shallow hull meant that ships could draw up on the beach, and also travel far up rivers.
- The siderudder was mounted on a permanent support. The mast was stepped forward at mid-point with the rigging only fitted one way.
- The highly carved figurehead on the prow of the ship was designed to inspire fear in enemies as well as showing the status and importance of the Vikings. It is likely that out at sea the figurehead would have been removed for safekeeping and put on at the last minute.
- Vikings ships were made mostly from oak. The keel was always from oak as it is strong and hard.
- Sails were probably made of wool. To prevent them becoming baggy when wet they were

waterproofed with fat from horses' necks. Seams were reinforced with strips of leather or linen. Sagas tell of red and blue striped sails, or of entirely red ones.

- The hull was made from overlapping planks (clinker-built). This meant a ship that was thin and light but very strong and flexible – a ship ideally suited to the rough seas of the North.

The *Knarr* or trading ship

- The *knarr* (sometimes spelled knorr) was used for transporting heavy and bulky goods. These were carried in an open hold in the centre of the boat.
- This could be covered with a tarpaulin to protect cargo in bad weather.
- There was further storage space beneath the deck.
- The *knarr* had fewer oar holes than the longship. Oars would not be used much because of the weight of the ship, laden with goods, so the single sail was the primary source of power.
- The *knarrs* were used mainly as merchant ships because of their storage space, but were also used by Vikings exploring and settling far distant lands – Iceland, Greenland and Newfoundland.
- The weight of the ships was not an important issue as speed was not crucial. These transport vessels were wider than the longships in order to carry greater loads.
- Like the longships they had shallow hulls in order to navigate up fjords and rivers, and land on beaches. The *knarr* had to be strong and seaworthy in order to withstand the stormy seas of the North Atlantic sea.





Teachers' notes 2

Ships and navigation *sheet 2 of 2*

Viking Crews

- The crew would include a helmsman, a lookout, a bailer, the sail-crew and the oarsmen.
- The crew slept in fur-lined sleeping bags and ate dried or pickled food and unleavened bread. On experimental replica voyages people have used fires lit in cauldrons suspended on chains as a mobile hearth or oven.

What made the Vikings special?

The Vikings' mastery of shipbuilding and navigation was crucial to their success as raiders and invaders, traders and ultimately settlers. For 300 years they were the most skilled seamen in northern Europe. There are no records of Anglo-Saxons attempting similar attacks or journeys across the sea.

The Viking ship was both beautiful and supremely functional. It represented the height of the Scandinavians' technical skill and was the foundation of their power. The ship was a Viking's most prized possession. If a high-born Viking did not die at sea, he might be given a ship burial on land.

For further information see the fact file.