### **KS1&2 NUMERACY - SELF DIRECTED SUPPORT MATERIALS**





© National Maritime Museum

KS1&2 NUMERACY - SELF-DRIECTED SUPPORT MATERIALS

# Cutty Sark numeracy challenge







### TEACHERS' NOTES

### Ks1&2 NUMERACY

# $Cutty\ Sark$ numeracy challenge



# Table of contents

Introduction	2
Curriculum links	3
Classroom resources	4

# Cutty Sark numeracy challenge



### Introduction

Cutty Sark is sailing to China to collect tea. There will be 28 sailors on the ship and lots of different jobs to do. Can your class help with some of the jobs?

There are 6 activities to complete, each focusing on a different numeracy skill – we recommend splitting the class into groups, each with a different job.

Activities are differentiated according to ability, with 3 levels to choose from (levels 2 and 3 coming soon). You could choose a set, or mix and match for different ability groups within your class – they do not need to be completed in any particular order, and you can select as many or as few as you like.

Activity sheets are available to download separately as pdf files or editable Word documents.

Activities encourage exploration of the ship and active learning.

We recommend splitting your class into small groups to complete the activities and providing adult helpers with copies of the activities in advance of your visit.

Children must be supervised by an adult at all times.

## Activity sheets

On-board activity sheets are available to download separately,

#### Level 1

- 1. Sailors problem solving
- 2. Captain counting with tallies
- 3. Carpenter measuring
- 4. Ship owner problem solving
- 5. Tea packers shapes
- 6. Cook counting and multiplying

Levels 2 and 3 coming soon.

Page 2 © Cutty Sark Trust, 2012



# Cutty Sark numeracy challenge

## Curriculum links

### Numeracy objectives

### KS1 KS1

- Counting, reading and writing whole numbers to 100.
- Multiplication as repeated addition
- Solving simple problems using counting
- Solving simple problems using number
- Sorting & naming 2D &3D shapes
- Using mental strategies to solve simple problems using counting
- Counting, measuring and comparing

### Cross-curricular links

KS1 History: exploring the way of life of people in Britain in the more distant past

KS1 Science: forces and motions

KS1 Art & Design: learning about differences & similarities of craftspeople & designers, including sculptors, in different times

## Cutty Sark numeracy challenge

# Classroom resources: crew and their jobs



#### Master

The ship's captain, a qualified officer responsible for the ship and all its operations, including navigation, managing the crew, loading and unloading cargo (and often finding the cargo) and complying with local laws. He had the largest cabin, in the stern.

#### First Mate

A qualified officer, second in command and in command of the ship when the Master was not on deck. He had a cabin in the stern accommodation.

### Second Mate

A qualified officer, third in command and often the ship's navigator. He had a cabin in the stern accommodation.

### Third Mate

Fourth in command and often taking the role of the bosun (boatswain) with responsibility for the condition of the ship and organisation of the crew on deck, particularly when raising or lowering the anchors. He might share the cabin of the Second Mate or have a berth in the aft deckhouse. Not all voyages carried a Third Mate or a bosun.

#### Steward

Looked after the officers, serving their meals and maintaining their quarters in the Liverpool House. Some stewards also helped on deck, handling the sheets (controlling ropes) of the sails. He had a cabin in the stern accommodation.

#### Cook

A petty officer who produced meals for the officers and men, cooked in the galley in the forward deckhouse. His berth was in the aft deckhouse.

### Sailmaker

A petty officer responsible for mending torn sails or pennants and any other canvas work. He usually reported to the ship's carpenter. His berth was in the aft deckhouse.

### Carpenter

A petty officer responsible for the maintenance of the ship's hull, rudder, masts and yards and for keeping the decks watertight. He had a narrow workshop in the forward deckhouse, and a berth in the aft deckhouse.

### **Apprentices**

Apprentices were boys or young adults between 14 and 21 training for a career in the Merchant Navy. They were taught skills such as navigation by the officers but had to perform all the other tasks undertaken by the crew, including taking the helm and furling sails. They lived in the aft deckhouse.

### Able Seamen

Men who had served on a ship for several years and held a certificate as proof of their competence in steering the ship and working aloft in the rigging and handling sails.

### **Ordinary Seamen**

Men with little or no experience at sea. They carried out the more menial and unskilled tasks, such as cleaning and painting.



Page 4 © Cutty Sark Trust, 2012

# Cutty Sark numeracy challenge



# Classroom resources: ship facts

Name of ship*	Cutty Sark
Date of launch	22nd November 1869
Built by	Scott & Linton of Dumbarton, Scotland
Type of hull construction	Composite clipper ship
Built for	John Willis, Willis & Sons
Port of registry	London
Registration number	63557
Cost	£16,150
Gross tonnage	963 tons
Net tonnage	921 tons
Sail area	32,000 sq. ft. (2,976 sq. m)
Number of sails	32 sails
Rigging	11 miles
Hull length	212.5 feet (64.8m)
Extreme length	280 feet (85.4m)
Beam (width)	36 feet (11m)
Registered depth	21 feet (6.4m)
Moulded depth	22.5 feet (6.9m)
Height of main mast	152 feet (47m)
Maximum recorded speed	17 ½ knots (20 mph, 32.5 kph)
Ship's flags	Cutty Sark flew signal flags representing the letters J K W S (depicting the name of the owner, JocK WilliS) and the Willis House flag - blue background with white diamond and red cross in the centre

<sup>\*</sup> Cutty Sark's name is taken from a poem, Tam O'Shanter, by Scotland's most famous poet, Robert Burns. In the poem, Tam O'Shanter, a farmer, is chased by a witch called Nannie who is wearing a 'cutty sark' (a lowland scots term for short undergarment or shift). The witch is the figurehead on the bow of Cutty Sark.

Find out more about *Cutty Sark's* history at www.rmg.co.uk/cuttysark