

Calculating Canal Cargos

For teachers

Subject: KS2 Maths

Topic: Percentages and Fractions; Local History

Worksheet setting: Classroom

Overview of the worksheet

This lesson uses topics covered in the visit from the Canal & River Trust's Explorers to practice word problems involving fractions and percentages.

Other resources

For further information on the Leeds Liverpool Canal and George see the Fact Files. Use the internet to find further pictures of canal boats if necessary.

Learning objectives

- To use fractions to solve word problems
- To link use of fractions to 'real-world' problems and connect to their local heritage

Leading up to this work

Before undertaking this activity, pupils are likely to have:

- Investigated life on the Leeds Liverpool through a visit to George
- Learnt about the different types of cargoes carried on Leeds and Liverpool Canal

Calculating Canal Cargos

Resource Sheet

1

200 bags of cargo are carried out of the docks at Liverpool.

2

10% of all cargo carried is sugar

3

Coal was carried separately.

4

The journey from Liverpool to Wigan took 11 hours on a steamer.

10% of all cargo carried is wool.

5

Double the amount of grain is taken than cotton.

6

Calculating Canal Cargos

Worksheet 1 of 2



Cargo has been carried on canals for over 200 years. One of the important jobs for people working in the docks was to make sure that the correct amount of cargo arrived at its destination.

Boat people were charged **tolls** based on the amount of cargo they were carrying. The heavier the boat, the more money they had to pay—so it was very important that they got the measurements correct!

Use the resource cards to answer the questions below:

1. How many bags of cargo were carried each day?

Coal: _____

Cotton: _____

Wool: _____

Grain: _____

Sugar: _____

2. Which information is not necessary to work out question 1?

The best known colliery business in Lancashire was the Wigan Coal and Iron Company. By 1923, they employed over 12,300 people.

Coal was very important to Wigan. It was once known as 'coalopolis!'



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Worksheet 2 of 2



Using the information that you worked out from questions 1 and 2, answer the questions below:

3. $\frac{1}{4}$ of the wool is lost overboard during a winter storm. How much is left?

4. On Tuesday there is $\frac{1}{4}$ more coal than there was on Monday. How much coal is carried on Tuesday?



In 1900 the Leeds and Liverpool Canal Company owned 16 lock horses.

5. The chairman of the Canal Company wants the grain and the sugar to travel quickly to their destinations. He decides to put the grain and the sugar on three fly-boats, which each have a capacity of 20 bags. Fill in the boats with the correct number of bags of sugar and grain:

