MAURETANIA Magic

Teacher's Notes

Art

Work Sheets 1 & 2

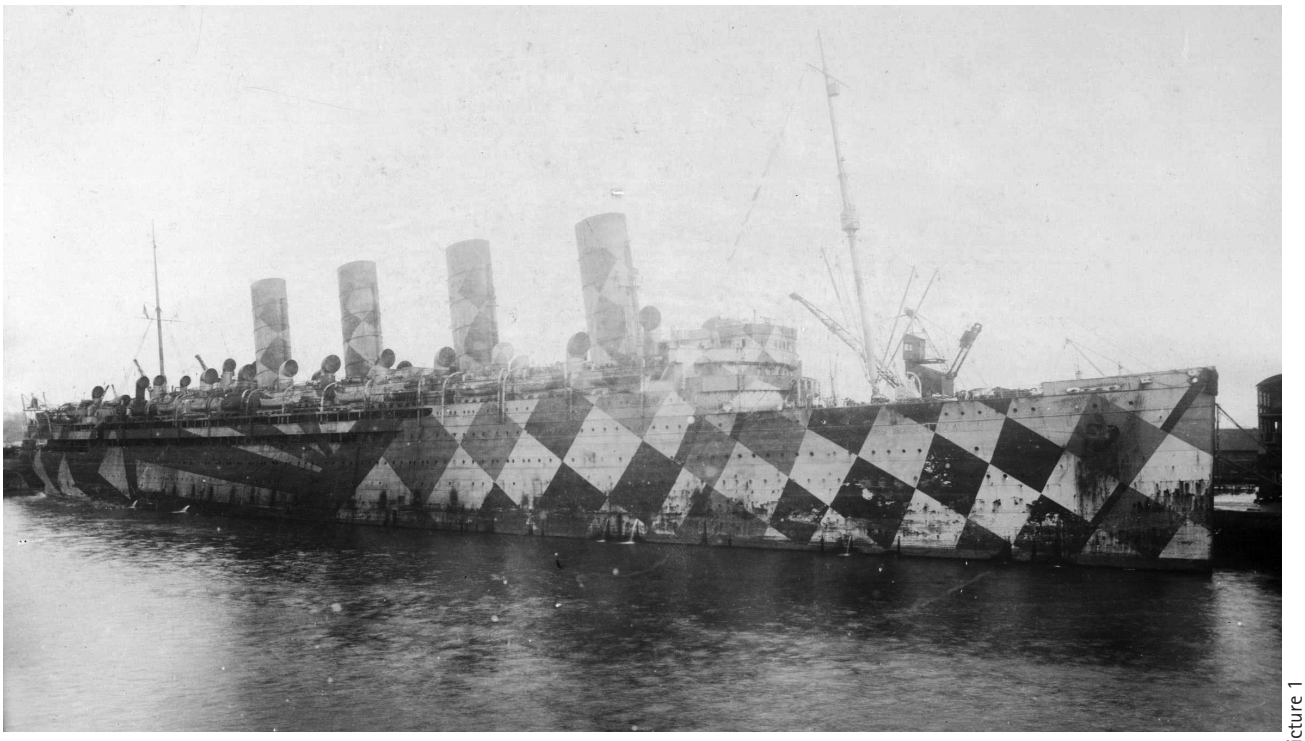
Dazzle Painting

During World War I the British and Americans faced a serious threat from German U-boats. These deadly submarines were sinking allied shipping at a dangerous rate and all attempts to camouflage ships at sea had failed. It was British marine painter Lieutenant-Commander *Norman Wilkinson* who came up with the idea of painting battle ships with huge zigzag bands and bold diagonals as a form of *dazzle* camouflage at sea (This style he based on "cubism" – see notes below.) The dizzying stripes and masses of contrasting colours worked to visually break up a ship's form, making it difficult for enemy submarines to accurately determine its course. The British called this camouflage scheme *Dazzle Painting*. (The Americans called it *Razzle Dazzle*.)

Cubism

A style of art developed in the early 20th century by Pablo Picasso and Georges Braque. Cubism uses geometric shapes to fragment and compose forms and to show objects from more than one view.

One of the many ships dazzle painted was the **Mauretania**



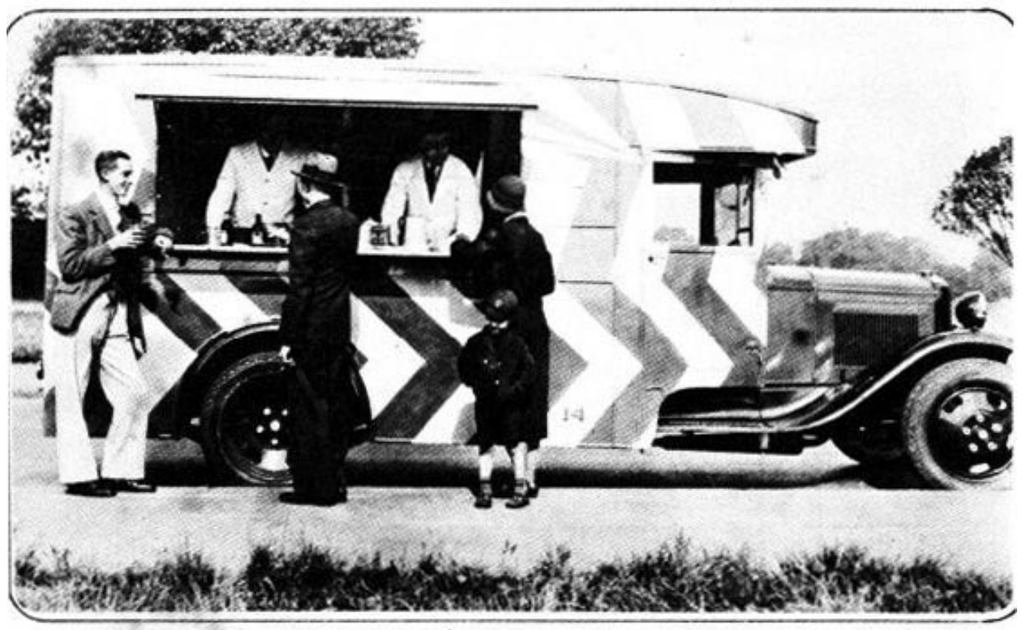
Picture 1

The events of World War I would see the Mauretania requisitioned by the British Admiralty and converted for use as a troop ship in 1915.

The Mauretania would make countless voyages ferrying troops to the European fronts. Picture 1 show the ship after dazzle painting.

"Dazzle" Painting takes over!!!

At this time dazzle painting became really well known. The bold designs and bright colours caught the imagination of both artists and the general public, particularly in England. Pictures 2, 3 and 4 are some examples of how dazzle painting was used for both clothes and vehicles.



ONE OF THE FLEET OF TRAVELLING CAFÉS ORGANISED TO AFFORD EMPLOYMENT TO EX-NAVAL OFFICERS AND MEN: A DISTINCTIVE "DAZZLE-PAINTED" MOTOR REFRESHMENT BAR.

Picture 2

Picture 3

THE GREAT "DAZZLE BALL" OF THE CHELSEA ARTS CLUB

Picture 4

Activity

Work Sheet 1: Children choose their own bright colours to dazzle paint the Mauretania.

Discuss with children other images they can dazzle paint (Animals, shapes, buildings etc).

Work Sheet 2: Children create their own patterns to dazzle a bird and a butterfly.

Teacher Notes

Discuss with children the type of patterns used in dazzle painting - stripes, zigzags, bold lines, geometric shapes.

Show examples of the "Mauretania" when it was dazzle painted.

Encourage children to use bold patterns and bright colours.

When children have finished their dazzling, lay out all the pictures and have them compare different patterns and colours.

Alternative Ideas

Worksheets can be printed onto thick paper or card and painted with water colours.
Use tissue paper or scraps of fabric instead of paint to make a textile picture.

Literacy

Year 1 links to the National Curriculum

Work Sheets 3 & 4

These sheets use the Mauretania as a spring board for exploring topics in history and geography. 'Billy Bear' could be the forerunner of the globe trotting Barnaby bear used in the QCA schemes of work for geography – perhaps he is Barnaby's grandfather? The children in the picture for the 'How do we know toys are old' sheet were actually photographed on the deck of the Mauretania. Using the sheets is therefore a chance for very young children to work with real archives.

The sheets link to the curriculum in the following way:

Work Sheet 3: How do we know some toys are old?

The sheet is a cross curricular activity (history and literacy) exploring how we identify 'old' toys and what defines an old toy, such as condition, materials etc. It links to:

QCA Scheme of work, History at key stage 1, Unit 1:'How do we know that some toys are old?'

The National Literacy Strategy, Year 1, term 1: T9 to write about events in personal experience linked in a variety of familiar incidents...

Work Sheet 4: Billy Bear's Travels

This sheet is also cross-curricular (geography and literacy) and introduces the idea of journeys in the past. It links to:

QCA Scheme of Work, Geography, Key Stage 1:

'Where in the World is Barnaby Bear?'

The National Literacy Strategy, Year 1, term 1:

T9 to write about events in personal experience linked in a variety of familiar incidents...

Year 5 & 6 links to the National Curriculum

The literacy sheets use images taken from the Mauretania, newspaper reports of the time and other images. They relate to the curriculum in the following way:

Work Sheet 5: On the Deck of the Mauretania (year 5)

Links to the National Literacy Strategy, Year 5, and term 3:

T3 to change point of view, e.g. tell incident or describe a situation from the point of view of another character or perspective

Work Sheet 6: I lived to see the Mauretania sail (year 6)

Links to the National Literacy Strategy, Year 6, and term 1:

T14 to develop the skills of biographical and autobiographical writing in role, adapting distinctive voices, e.g. of historical characters...

Both sheets link to the Key Stage 2 National Curriculum History by encouraging:

Transferable literacy activities:

Both sheets ask the pupil to carry out a literacy task using research and imagination to construct a piece of writing told from the perspective of another person.

'I lived to see the Mauretania sail...' (year 6), demands that the pupil writes from the viewpoint of an historical character rather than as themselves and is therefore more sophisticated than 'On the deck of the Mauretania' (year 5). The worksheet requires more research and consideration.

The sheets are designed in this way to be transferable between the two year groups and present a 'sliding-scale' of difficulty. More able year 5 pupils can complete 'I lived to see the Mauretania sail... (year 6) and less able year 6 pupils can complete 'On the deck of the Mauretania' (year 5).

Science

Work Sheet 7: Mauretania Sinking or Floating?

This worksheet builds upon, or could help introduce, the science of sinking and floating. It brings out some very puzzling facts and causes pupils to think hard about what their observations mean and how things can be explained. The practical task is essential and could follow after other simpler exercises on what sinks and what floats or could stimulate other sinking and floating investigations which pupils might suggest and plan themselves.

NC references

Ks1 Sc3 1a,b

Ks2 Sc1 1a,b 2d,l,j,k,l

Ks1 and 2 communication skills. Sc1 2l Sc4 2b

Work Sheet 8: Horse Power

This worksheet uses the concept of 'power' to make comparisons and use a bar chart to present information and make comparison easier.

It reinforces the use of images/graphs to show relative sizes of quantities being compared.

NC references

Ks2 Sc1 2h

Work Sheet 9: Car tug of war

The car tug of war worksheet is about opposing forces and could help to reinforce work already covered on the topic or act as revision prior to tests.

The basic principle is that there is no motion either way as long as the opposing forces are balanced or equal.

Friction plays an important part since the cars can only exert their full force if the tyres have enough grip and this relates to a force called friction.

Friction is reduced if the road is slippery so the cars can no longer grip as much in the wet and so Mauretania would win the tug of war.

Some of the questions should promote good discussion and pupils may be able to produce their own arguments as to what should happen and why.

NC references

Ks2 Sc4 2b,c,d,e

Ks2 Sc1 2 l,j,k,l

Maths

Work Sheets 10 & 10b: Fascinating facts and figures – the answers

Can you work it out?

1 The total revenue raised through ticket sales would be £95 918
(563 x £150) + (464 x £10) + (1138 x £6)

2 To calculate the average speed per hour to the nearest mile per hour it is sufficient to consider the 4 days, 10 hours, 51 minutes to be 107 hours (96 + 10 + 1). The 2784 nautical miles should then be divided by 107 to give the answer 26.

To calculate the average speed rounded to two decimal places it is necessary to change the 4 days, 10 hours, 51 minutes to minutes. This gives a total of 6411 minutes (96 x 60) + (10 x 60) + (51). The 2784 nautical miles should then be divided by 6411. This gives the answer in miles per minute. This figure should now be multiplied by 60 to convert to miles per hour. On a calculator this would require the calculation 2784 ÷ 6411 x 60. This gives the answer 26.055217 or 26.06 rounded to two decimal places.

3a The ship travelled approximately 3204 statute miles. This can be worked out in a number of ways although the easiest to understand is probably to change the nautical miles to feet (2784 x 6076 = 16 915 584). Divide the answer by 5280 to convert to statute miles.

A more efficient method is to express 5280/6076 as a percentage (86.9%) and to then divide the 2784 nautical miles by 86.9

3b The average speed in mph (statute) was approximately 30mph (3204 miles divided by 107 hours).

4a The Mauretania travelled approximately 5156 km on her record-breaking voyage.

This can be calculated in a number of ways.

For example, (2784 x 6076) ÷ 3281 or (3204 x 5280) ÷ 3281

4b Her average speed in km/h was approximately 48 km/h (5156km ÷ 107 hours)

5

Knots	Miles per hour
1	1.2
2	2.3
3	3.5
4	4.6
5	5.8
10	11.5
25	28.8
50	57.6
100	115

It is a relatively easy process to use the table to convert units.

For example, to calculate the speed in mph of 37 knots simply add 28.8 (25 knots), 11.5 (10 knots) and 2.3 (2 knots) giving a total of 42.6 mph

Similarly, to calculate the rate of knots equivalent to 40 mph simply add 25 knots (28.8 mph) to 10 knots (11.5 mph) to give 35 knots.

Children should be reminded that these are approximations only.

Links to the Framework for Teaching Mathematics.

The following links are given as a guide only. The actual aspects of mathematics addressed may be altered by any adaptations teachers make to the activities.

Work Sheet 10 & 10b; Fascinating facts and figures

Key Stage Two

Strand 1 – Using and Applying Mathematics

Solve one and two-step problems involving numbers, money or measures, including time; choose and carry out appropriate calculations, using calculator methods where appropriate.

Strand 2 – Counting and Understanding Number

Round numbers, including those with up to three decimal places.

Strand 4 – Calculating

Use efficient written methods to add and subtract integers and decimals and to multiply and divide integers and decimals.

Strand 6 – Measuring

Measure and calculate, using imperial units in everyday use; know their approximate equivalent metric values.

Strand 7 – Handling Data

Organise, present analyse and interpret the data in tables

Describe and interpret results and solutions to problems, using the mean.