Guidelines for the use of Working out the bearings between each ship

Activity title:	Working out the angles between each ship
Curriculum area:	Maths
NC objectives:	Maths: Ma2 1c, Ma3 4b, c,
Main learning objective:	Understand what a right angle is, what an acute angle is and what an obtuse angle is and use protractors to find the angles accurately.

Lesson plan ideas, activities and resource sheets

INTRODUCTION: 18 minutes

- Introduce the lesson by explaining that they will be focusing on angles by predicting angles and measuring angles accurately.
- Show the class a right angle on the board and then ask the class to identify the same angle in the classroom.
- Introduce the words OBTUSE (larger than a right angle) and ACUTE (smaller than a right angle) angles and explain the meanings. Draw angles on the board and identify them correctly using the new vocabulary.
- If access to PRIMARY GAMES VOLUME 2 is possible, use 'Banana Hunt' and play the game as a class, guessing the angles.
- Explain the main task to be carried out by the pupils.

MAIN ACTIVITY: 35 minutes

- Provide the class with the '2.1a Working out the bearings between ships' worksheet to complete. The pupils must use a protractor to measure the angles between each ship. The ships are facing ahead and therefore this is where 0 will be. Write the angles next to the lines as with the example.

PLENARY: 10 minutes

- Go through the answers to the angles as a class and sort out any problems.
- Choose a selection of children to be blindfolded at the front of the class and the rest of the children must guide them around the room using angles to turn and the number of steps to move forward.

Suggested extension activities or cross curricular links:

- Find a picture of a sailing-ship on the internet and look at the various angles made by the sails and the ropes in the rigging
- Find or draw a compass rose and outline the cardinal points (N, NE, E, SE, S, SW, W, NW)