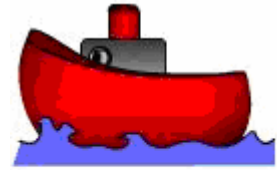




**Sample Lesson Plan**  
**The Big Bus Module: Terry the Tug**



Terry The  
Tug

**Title**

Using *The Big Bus* **Terry the Tug** to develop early number concepts.

**Introduction**

A rewarding, interactive game with appealing animations, narration and sound effects. Terry the Tug addresses counting and number familiarity, addition and subtraction and using mathematical ideas to answer practical problems.

**In this lesson**

The children are introduced to Terry and shown the techniques need to add or remove passengers. They are also shown how to move the barge around the Lagoon. There are opportunities to discuss the mathematical concepts involved in the demonstration module, then to undertake a module for themselves.

**Age Range:** 3 - 7 years

**Lesson Plan**

**Learning objectives**

Having completed this module most children will have developed their ability to:

- Use and apply mathematics
- Deal with mathematical concepts through practical activity
- Use mathematical language to explain their reasoning when solving problems.

**Technical preparation**

Install *The Big Bus* CD-ROM on to the computer. After a short opening sequence select the button to visit **Bo Bear's World**. Open the Information Booklet index and scroll through the available activities. Select Terry the Tug and then **Start the activity**.

On the **Main Menu** page, select **Menu**. Use the tick box to set the module at **Level 3**. Set the counter at the bottom of the page to run the module three times before returning to the start screen. Click on **Start game** to return to the start screen at the new level.

**Additional resources**

Sets of objects such as counters, blocks or small animal toys that can be used to practise the module away from the computer.

**Previous experience**

An understanding of the terms "the same", "sharing equally" or "dividing by two" may all be useful in helping the children grasp the concepts being dealt with at this level. They should be familiar with the figures 2 to 10.

**Introducing the module**

Gather the children around a large computer monitor or interactive whiteboard. Recap the **key terminology** the children will encounter in the **module**. Direct the children's attention to the computer monitor or whiteboard. Introduce the children to the story, showing them how to have the text narrated or repeated by clicking on the text. Select **Start** this level requires the children to put "**The same number**" of passengers in each barge. Discuss with the children how many passengers need to go into each of the barges, depending on the total number required. Are there different combinations of animals that could be used to answer the task?

**Show** the children how to click on an animal to choose it (they can change their mind by clicking on the X in the corner of the quay), then clicking on the barge to put their animal on board.

Point out how the counters on each barge show how many are aboard. Clicking on an animal already on the barge sends it back to the quayside. Once the children are happy with the loading of the barges, click on Terry's arrow to move him away. If the barge is not loaded correctly, Terry does not move, but the children are reminded of the instructions and given the opportunity to move animals to try again. Discuss with the children what changes need to be made, and then give individuals the opportunity to do this for themselves.

Once the barges are correctly loaded, choose a destination for Terry and watch him move off across the lagoon.

The module will be repeated two more times. Allow the children to have more input on how to load the barge, using the mouse themselves and taking the opportunity to discuss their reasoning and decisions, whilst developing appropriate language.

After the initial demonstration, and if more than one computer is available, the children could now break into working groups and undertake the module for themselves. With younger children, it will help if you have already set the module up at the appropriate level.

Allow the children about 15 minutes to complete the module, and then gather them back together to discuss how they got on. Discuss the numbers they were presented with. Did it help when they could see the passengers in each barge, to make sure there was the same number? Did some children count the animals and others look at the figures displayed on the hull?

#### **Classroom management**

A single classroom computer running *The Big Bus*, using a large monitor or interactive whiteboard, is an effective whole class teaching resource. Introduce the module to the whole class before pupils break into their groups. If you have access to a computer suite this module can be completed as a whole class lesson. If you have access to only one or two computers, pupils will need to complete the module on a rotational basis.

#### **Duration**

Each group of children will require approximately 15 minutes of computer time. The teacher introduction and follow-up time will take approximately 15 minutes and 10 minutes respectively.

#### **Differentiation**

This module can be differentiated to suit **all** pupils, irrespective of reading ability, as all text is fully narrated. The five levels of the module deal with different number sets and mathematical terms allowing for appropriate challenges to be set for a wide range of children.

#### **Extending the module**

Using sets of objects away from the computer, children can practise the activities introduced by Terry the Tug. The concepts can be extended by the introduction of up to 20 objects.

#### **Curriculum Information**

**Foundation Stage:** Mathematical Development.

**The National Curriculum in England for Mathematics (KS1):**

Ma2: 1a, 1b, 1c, 1h, 1i, 2a.

**The Curriculum Framework for Children 3-5 (Scotland):**

Knowledge and Understanding of the World.

Physical Development and Movement.

**The Scotland 5-14 Guidelines for Mathematics:**

Number, Money and Measurement: Level A, B.

**The Scotland 5-14 Guidelines for Environmental Studies:**

Social subjects – Using Maps.

**The Northern Ireland Curriculum for Mathematics (KS1):**

Number – Understanding Number and Number notation: a, b, c.

**Desirable Outcomes for Children's Learning before Compulsory School Age (Wales):** Mathematical Development.

**The National Curriculum in Wales for Mathematics (KS1):**

Ma2: 1.1, 1.4, 3.1.