

IT – An Introduction to Modelling

Keystage 1

Aims: pupils learn that a computer can represent real or fantasy situations. Pupils use IT to build a representation of themselves.

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Setting the Scene

A computer can represent real or fantasy situations.

Short Focused tasks

A computer representation allows the user to make choices and that different decisions produce different outcomes. In this unit pupils use ICT to build a representation of themselves.

The representation can then be used to play an online game.
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Overview:
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Make a Me

Pupils make a representation of themselves in ‘Make a Me’

A2B

Pupils use their representation in the ‘A2B’ game and examine the results of different choices

Who’s the Driver

Pupils play ‘Who is the Driver’ and compare their representations actions to reality

Build a Bus

Pupils play ‘Build a Bus’ and print out their vehicle
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Links: Literacy
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QCA Links: 2a Vehicles, 2c Winding up
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IT – An Introduction to Modelling

Keystage 1

Setting the scene – Make a Me

<p>Learning Objectives Children should learn</p>	<ul style="list-style-type: none"> • That a computer can represent real or fantasy situations
<p>Tasks</p>	<ul style="list-style-type: none"> • Pupils design a 2D 'Me' which can be saved and used in each 'Ding Ding' game
<p>Teaching Activities</p>	<ul style="list-style-type: none"> • Pupils use the 'Make a Me' game to build a representation of themselves. When using the computer ask the pupils if they would put the clothes on in the same manner. • Discuss with the pupils the different features available. Are they realistic? • Ask the pupils if their 'Me' is a good representation of reality
<p>Learning Outcomes At the end of this module children should be able to:</p>	<ul style="list-style-type: none"> • Understand that they can make choices and that people make different choices for different reasons

IT –A2B

Keystage 1

Short focussed task 1 – A2B

Learning Objectives
Children should learn

- **Key idea:** that a computer representation allows the user to make choices and that different decisions produce different outcomes
- **Technique:** to use a mouse to move and place items accurately on a screen

Tasks

- The representation of the pupils will be present during the games
- Pupils decide which buses different passengers should take
- There are points of congestion around the ‘Ding Ding’ city which can delay journeys

Teaching Activities

- Pupils use ‘A2B’ to make choices about which buses to catch
- Give pupils opportunities to talk about why they made specific choices

Learning Outcomes
At the end of this module children should be able to:

- Understand that they can make choices and that people make different choices for different reasons
- Understand that their decisions can produce different outcomes
- Use the mouse to control the pointer and move and place objects with accuracy

Short focussed task 2 – A2B

Learning Objectives
Children should learn

- **Key idea:** that a computer can be used to represent a wide range of environments

Tasks

- The representation of the pupils will be present during the games
- Pupils decide which buses different passengers should take
- There are points of congestion around the ‘Ding Ding’ city which can delay journeys

Teaching Activities

- Discuss the environment represented
- Ask the pupils if the representation is a good one
- Ask a set of questions about the ‘Ding Ding’ city – what might they expect to hear in this environment? Can they hear any of these things? Allow pupils to explore the game and to discuss the decisions they make

Learning Outcomes

- Understand that a computer can be used to simulate/model an environment where choice can be made

IT - Who's the Driver

Keystage 1

Worksheet 3

Short focused task 1 – Who's the Driver

<p>Learning Objectives Children should learn</p>	<ul style="list-style-type: none"> • Key idea: that a computer model is not an exact replica of the original
<p>Tasks</p>	<ul style="list-style-type: none"> • Pupils play pairs – how do they turn the cards? What happens when a pair is correctly identified? Does this replicate real life?
<p>Teaching Activities</p>	<ul style="list-style-type: none"> • In a class discussion pupils compare 'Ding Ding' with real life • Pupils play 'Who is the Driver', a simple pairs game
<p>Learning Outcomes At the end of this module children should be able to:</p>	<ul style="list-style-type: none"> • Know that representations of real or fantasy situations can be made in many different ways and although some, like television programmes and films, are very complex they do not replicate real life exactly

Short focused task 2 – Who's the Driver

<p>Learning Objectives Children should learn</p>	<ul style="list-style-type: none"> • Key idea: that they can use a computer to create a representation of various scenarios • Technique: to use simple tools in a software package • Technique: to print out their results
<p>Tasks</p>	<ul style="list-style-type: none"> • Pupils build a bus to their specifications
<p>Teaching Activities</p>	<ul style="list-style-type: none"> • Pupils use 'Build a Bus' to construct various different buses using combinations of bodies, wheels, seats and lights • Show pupils how to use the print tool to print out their own work
<p>Learning Outcomes At the end of this module children should be able to:</p>	<ul style="list-style-type: none"> • Use a program to create a representation of a scenario • Print out their work unaided