Sherston Software

Wizard's Return

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The Wizard's Return

(Sequel to The Wizard's Revenge)

Program designed and written by S Hosler

A mathematical adventure for the BBC range of computers.

INTRODUCTION

The Wizard's Return is a mathematical adventure intended for children of approximately 9 to 10 years of age. The program covers a wide range of mathematical areas with particular emphasis on logical thinking and problem solving activities, presented in an interesting and enjoyable way. This adventure has been designed as a follow up to the Wizard's Revenge but it is self contained and it is not necessary to have completed the earlier adventure.

The purpose of the adventure is to rescue the Dragon King who is trapped in an air bubble somewhere beneath the sea and to do so the children must solve many new and original mathematical problems. Each time the adventure is attempted the type of problem will remain the same but a large number of the problems themselves will change so that answers and solutions cannot be memorised from previous attempts. A further variation is the facility to set the degree of difficulty of the problems at 'Normal' or 'Hard'. Changing the difficulty level will also change the passwords required to find the Dragon King.

The program is on two discs. Part one, on disc one, takes about 20 - 30 minutes to complete and should attempted at one sitting. Part two is on disc two and should take an hour to 90 minutes to complete but if this is not desirable, or does not fit in with the school timetable, children can leave this disc and return to it later.

It is important that the children first read the accompanying short booklet to enable them to understand the background to the story but once the adventure has started there is a continuous and easy to understand dialogue between the children and the computer. Some children may find it helpful to have a pencil and paper available during the adventure.

LOADING

Place the required disc in the disc drive. Hold down the SHIFT key, press and release the BREAK key and then release the SHIFT key. This will automatically load and run the program.

IMPORTANT NOTE: THE WIZARD'S RETURN IS A DISC DRIVEN ADVENTURE AND THE DISC MUST BE LEFT IN THE DISC DRIVE THE WHOLE TIME THE PROGRAM IS RUNNING.

OPERATION

If the ESCAPE key is pressed during one of the mathematical problems the program will return to the instructions for that problem. Otherwise the ESCAPE key will return the program to the beginning of the adventure on whichever disc is loaded.

MAIN MENU

        The Wizard's Return

        Main Menu

            1 Teacher Control
            2 To Start Part 1 (or Part 2)

        Please type a number ---

1 Teacher Control

This takes you to the Teacher Control menu.

2 To start Part 1 (or Part2)

This will start either part 1 or part 2 of the adventure, depending on which disc is in the disc drive.

TEACHER CONTROL MENU

        Press ESCAPE for Main Menu
        Teacher Control

            1 Sound Level
            2 Set Difficulty
            3 Introduction

        Please type a number ---

1 Sound Level

When first loaded the sound is set to normal level but the volume can be reduced by pressing key 1 or switched off by pressing 0. Pressing key 2 again will restore the sound to normal level. The computer will make a sound indicating the volume level set by the key pressed. Press ESCAPE when the setting is correct to return to the Teacher Control Menu.

2 Set Difficulty

The degree of difficulty of many of the problems found in this adventure can be set at 'Normal' or 'Hard'. The setting must be made at the beginning of each part of the adventure and cannot be changed once the children have started. It is suggested that the children attempt the adventure on the 'Normal' level first. Please note that the passwords in the 'Normal' level are different to those on the 'Harder' level.

The following gives details of the problems where the degree of difficulty may be changed, and also the difference between the two levels. You may wish to go through the program once at each level to appreciate the differences.

Hovercraft (Multiples)

    Normal: Range of numbers 1 - 30
    Harder: Range of numbers 1 - 60

Lighthouse (Angles/degrees)

    At the harder level the ship moves towards the island at twice the speed as when the level is set to normal. This reduces to half the time the children have in which to decide the angle required to correct the lighthouse beam and thus warn the ship of danger.

Octopus puzzle (Patterns)

    At the harder level the patterns produced are far more complicated than at the normal level.

Eric's Puzzle (Symmetry)

    The patterns produced at the harder level are considered to be very difficult.

Cave Mines (Tables)
    Normal covers the 2 to 6 times tables .
    Harder covers the 4 to 9 times tables.

3 Introduction

This gives a screen of introductory notes for teachers.

TEACHERS' SYNOPSIS

This is an adventure in two parts in which it is necessary to overcome obstacles in the form of mathematical problems to bring it to a successful conclusion. Failure to give the correct answer carries no penalty other than that the program will pause at that point substituting new problems until correct answers are given.

Part 1 (Disc 1)

The adventure starts on the last day of term at school where the children are solving problems (angles and basic logical thinking) by programming Mary, the school's robot netball player. After school, the children are informed by the Dragon King's butler that his King has again been imprisoned by the Wicked Wizard, this time in a bubble at the bottom of the sea. In an attempt to help, the children travel to the island by hovercraft, avoiding obstacles as they go (problems involving multiples of 3). After following various trails - some of which turn out to be dead ends - they eventually end up helping the lighthouse keeper to operate the beacon (angles) and then put together a submarine (pentominoes problems) which they will need in their attempt to rescue the King.

Part 2 (Disc2)

The children now have a map to help them find three sea creatures who know a password. The map is included in the centre of this booklet in case you would like to photocopy it. Using compass directions the children move around the map, diving under the sea from time to time in their search for these creatures and taking care to avoid hidden dangers. To obtain the three passwords the children must help Olive the Octopus with her pattern problems, Eric the Eel with his symmetry problems and then work their way to the back of the cave (tables) to find O.T. The pirates on Pirate Island then check that the passwords are correct and set the children a further problem to solve before guiding them to where the Dragon King is held prisoner.

Once free the Dragon King makes the children 'Dragon Friends for Life' and there is a certificate in the middle of this booklet that you can photocopy and award to children who succesfully complete the adventure.

TEACHERS' NOTES

In addition to the mathematical problems included, 'The Wizard's Return' should also provide experience in decision making, planning and logical thinking. To this end it is suggested that you always have two or three children working together when they attempt the program as the children will benefit greatly from the co-operation and discussion involved in trying to solve the problems together.

The program can be used in its own right or linked to a class topic. Alternatively the program could be used as a basis for a mathematical topic with the children extending their knowledge of the various mathematical activities they encounter in the adventure.

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