Telling the time and setting the clock.



by Bourne Educational Software

Enables children to learn to tell the time and set a clock through easy stages of:

- hours only
- minutes only
- hours and minutes together
- Aids learning about time.

SPECIAL FEATURES

- Utilises a large and clear clock face to help children.
- An appropriate stage can be chosen at any time.
- Option to set 1 or 5 minute accuracy to retain the interest of children in the upper age group.
- Features full BES MONITOR facilities. Gives information on individual children's entries, allowing identification of problem areas.
- Complete with full explanatory booklet.
- · Widely used in schools.

Best suited for children aged 4 to 9 years.

TIMEMAN ONE

The program draws a clock and places a man halfway up a ladder. The program asks "what time is it?". If the child answers correctly, then the man climbs two steps up the ladder. When an answer is wrong, then the man goes down a step. The program tells the child what was wrong and gives the child another go. If the second try is wrong, then the program shows the correct answer. When the child obtains enough correct answers for the man to reach the top, he dances a jig at the top and plants a flag. Each time he gets to the top he earns another flag.

The program has three stages for telling the time. The first stage introduces the hour hand, the second the minute hand and the third stage combines the two. Having learnt to tell the time, the program provides three similar stages to enable children to set the clock, in each case helping children when an incorrect answer is entered.

Please note: Minor variations in specification may occur due to characteristics of different micro-computers and operating systems.

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INTRODUCTION

The program has been designed to aid children to tell the time and set a clock. It is recommended for use with children of between 4 and 9 years old, and in situations where practice of these skills is needed. The option available to choose time intervals of one or five minutes ensures that interest is retained even when using the program with children at the upper end of the age range. The program expresses time in minutes past the hour, in line with the widely used digital clocks and watches. A further program, Timeman Two, covers minutes to the hour, half and quarter hours and the 24-hour clock, and is described more fully in the section "The Timeman Series"

LOADING

It is best to press CTRL and SHIFT and whilst holding them down, press and release the ESCape key. This resets the computer before loading. The cassette should be placed in the Datacorder with the label upwards and the tape wound back to the beginning.

4 Timeman One

Simply press CTRL and the small ENTER key, followed by pressing the PLAY key on the Datacorder and then pressing any other key.

Loading of the program takes about

five minutes in all.

Having completed loading, the program displays the title and copyright screen for a few seconds. No entries are necessary and the program will automatically move on to the main menu screen.

THE MAIN PROGRAM

The program offers the following options which can be chosen in any order or repeated any number of times:

1. Telling Hours

The clock shows the minute hand at the 'o'clock' position, and the hour hand points to any hour, the numbers of which are illustrated on the clock face. The child is required to enter the appropriate hour and then press ENTER. The DELETE key will delete the number(s) if required before ENTER is pressed. All keys other than the number keys, the DELETE, ENTER, and ESCape keys, are deactivated. When the sign <SPACE> appears the program will wait until the space bar is pressed. Pressing ESCape twice at any point in the program will cause the program to return to the main menu.

On entering the correct number the 'happy face' smiles and congratulates the child, and the man climbs two steps up the ladder. In the event of the entry being incorrect, the face grimaces, the entry is shown on the clock, and the child is invited to try again. Should the child again enter an incorrect time then after being shown their entry, the correct answer is shown. At each incorrect entry the man climbs one step down the ladder.

If the stage is completed so that the man reaches the top before a total of 15 entries, then he dances to a tune and plants a flag to show the completion of a stage. This flag is carried over for each individual child to the next stage, and so a series of flags can be built up. As soon as a new name is entered after choosing an option from the menu, a new sequence of flags is begun.

2. Telling Minutes

The clock shows the minute hand only, and randomly points to any number of minutes on the clock face (see Section 8 for setting the minute intervals to either 1 or 5 minutes). The clock face shows the number of minutes at 5 minute intervals. The appropriate number of minutes should then be entered and ENTER pressed. Again, the DELETE key will erase the entries before ENTER is pressed. Note that at the top position the entry of either 0 or 60 minutes is acceptable. In the event of a correct entry, the 'happy face' smiles, and the man moves up two steps. If the entry is within plus or minus 3 minutes of the correct answer, then the comment 'CLOSE!' is made, the man climbs one step, and the correct answer given. If the answer is more than 3 minutes out, then the sequence for an incorrect answer occurs, the man climbs down one step, and the child is invited to try again.

As with 'telling hours' completion of the stage within 15 attempts is marked with a flag, which is carried over to future stages.

3. Telling Hours and Minutes

The clock shows both hours and minutes hands, and randomly points to any time either at 1 or 5 minute intervals (again see section 8). Entries are required for both minutes and hours (shown as __minutes past __o'clock). Minutes are entered first and ENTER pressed, then the hours can be entered and ENTER pressed. Again the delete key can be used before the second ENTER is made.

The same responses are given as in 'telling minutes', with the need to give exactly the correct answer for the man to climb two steps up the ladder.

4. Setting Hours

In this stage, the clock needs to be 'set' by pressing the 'H' key to rotate the hour hand. The child is asked to set the clock to a particular time (this is chosen at random). Note that it is easier at first to press the key repeatedly to move the hand one unit, but by holding the key down the auto repeat function built into the program will rotate the hands. ENTER is pressed when the correct

hand position is believed to have been reached.

The responses for correct and incorrect entries are the same as for telling hours, except that in this case feedback is in the form of telling what hour the clock has been set to, with the invitation to 'try again' to set the clock at the original hour.

5. Setting Minutes

Random numbers of minutes (at 1 or 5 minute intervals as described in section 8) are required to be set during this stage. Operation of the 'M' key moves the minute hand round, again with the auto repeat facility if required. The DELETE key steps the hands backwards.

Similar responses are given as with 'telling minutes', with the exception that an incorrect answer leads to a statement as to the number of minutes shown by the incorrect setting, and the invitation to try again.

6. Setting Hours and Minutes

Both the hour and minute hands are needed to be set in this stage. The operation of the 'H' and 'M' keys move the hour and minute hands respectively round the clock face. Either key can be used to start. As the minute hand is moved the hour hand is correctly positioned relative to the hour marks. When the correct setting is believed to have been reached, ENTER should be pressed.

In the event that it is realised that a setting is inaccurate, then the DELETE key can be used to step the minute hand backwards before ENTER is pressed.

If the setting is within plus or minus 3

minutes of the correct time, then a 'close' response is obtained and the man climbs one step. Outside of this range then the 'happy' face grimaces and the man moves down one rung. The criteria for achievement of a flag is the same as in other stages.

7. The BES Monitor System

Timeman One

All interactive BES programs contain a performance recording system or monitor. Using this, teacher, parent or the child can see how well the task has been performed. Progress can be quantified as a result. Only then can a

child's ability and educational needs be identified.

Each time a new stage is entered after starting the program from the main menu, a new monitor record is created. The facility will hold the record of the last six users of the program (after number six, number seven will be recorded over number one, eight over two, etc.).

Access to detailed information on individual children's entries is available under this option, and data is retained in the following detail:

- a) Individual child's name.
- b) Time taken.
- c) Category attempted telling or setting time.
- d) Time settings asked (white), correct entries (green) and incorrect entries (red). These times will also show whether one or five minute intervals have been chosen, and whether the stage used was hours, minutes or hours and minutes.

Careful analysis of the information stored in these records can provide a valuable guide to specific problems or more general difficulties or successes, and provide a guide for further practice.

8. Setting Minute Intervals

To broaden the range of interest and age group to which the program appeals, and to further develop skills, the program has the facility to set the random time functions to one minute accuracy. The program, unless this option is exercised, is set to multiples of 5 minutes.

The option chosen is clearly identifiable by the white (set) numbers in the monitor records.

THE TIMEMAN SERIES

The programs are intended as a supplement to existing teaching methods, using the motivational aspects of the microcomputer to encourage practice and so achieve the required skills.

Timeman One is one of a series of programs to help children understand time and its concepts. The companion program, Timeman Two, features the following options:

- 1. Telling Minutes to the Hour
- 2. Telling Quarter and Half Hours
- 3. Telling the 24-Hour Clock
- 4. Setting Minutes to the Hour
- 5. Setting Quarter and Half Hours
- 6. Setting the 24-Hour Clock

These are aimed at developing children's ability to tell the time, and their understanding of the 24-hour clock. Generally, it has been found that the concepts covered in Timeman Two are more difficult for children to grasp than those of Timeman One, although this is dependant upon individual children's background and experience.

BES PROGRAMS

Timeman One is one of a series of Microcomputer programs produced by Bourne Educational Software Ltd with the aim of making learning both easy and enjoyable. The programs are aimed at both home and school use, and are designed to enable children of the appropriate age range to operate them readily through common use of such items as ESCape to return to a menu of

program options; <SPACE> to move on to a next screen, and so on.

A common feature with most BES programs is the BES MONITOR system, which allows the teacher, parent or child access to the specific entries made, so allowing identification of specific achievements or problem areas. This does not preclude the use in appropriate programs of a more simple and visible scoring system, which is designed to aid motivation.

BES programs are designed to be largely self-explanatory, and follow styles. Children familiarise themselves with new programs, and can use them if required with the minimum of help.

OTHER BES PROGRAMS

Happy Numbers

A program to help children learn their numbers and count without need of reading skills. Attractive graphics and scoring make this a favourite with 3 to 5 year olds. (Age 3-5 years).

Happy Letters

The program to teach children to match small and capital letters both on the screen and the keyboard. They love trying to stop the crocodile eating the fishes. Features attractive use of sound and colour as well as easy identification of problem letters for further practice. (Age 3-6 years).

World-Wise

Two programs to stimulate children to 'teach the computer' about geography. Encourages the use of atlases and reference books, helps exam studies and introduces the use of the computer to store information. Data can be readily saved and reloaded at any time. (Age 7-15 years).

Map Rally

Try to find the hidden checkpoints in a race against your opponent or the clock! Map co-ordinates and directions are soon mastered as children learn to control the cars. After each rally they can watch the cars retrace the routes taken, showing how well each driver did. (Age 7-13 years).

Happy Writing

The program helps children form their letters and numbers correctly and encourages them to practise writing. A moving pencil point shows clearly where to start each figure. Tractors, attractive colour and sound all help to keep their interest. (Age 3-5 years).

Animal/Vegetable/Mineral

This program provides hours of fun and enjoyment as the computer tries to guess the object a child has thought of. The computer's failure to guess correctly encourages children to help the computer to tell the difference between the various objects. The program stimulates discussion and the use of reference books. Suitable for all ages 7 years and upwards.

Wordhang

This version of the traditional "Hangman" spelling

game has been described as "...the Rolls-Royce of them all"! Features over 250 words plus the ability to enter your own words – either individually or as a group (ideal for that weekly spelling list!). Improves spelling at all ages of 5 years and upwards.

THIS BOOKLET

BES programs always include explanatory booklets of this type to satisfy several objectives. Firstly, to identify the objectives of the program, and to give guidance as to some possible uses of the program based on experiences during the extensive in-classroom and in-house testing period. Secondly, they are designed to give an understanding of the sequences encountered in the programs, since in many situations the time of access to the micro is at a premium. Thirdly, the booklet will assist in using the substantial content of BES programs to the full, through reference to it before, during and after use of them on the micro.

In the event of any problems with the use of this program, or ideas as to improvements which could be incorporated, please do not hesitate to contact BES at the address on the back cover.



"... an entertaining and highly instructive program which has been thoughtfully designed to appeal to children and be as useful as possible for guided learning either at home or in the classroom."

The Micro User

BES

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