

Hartley

PINE LANE ELEMENTARY SCHOOL  
Parker, Colorado 80134

# Clock



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## SPECIAL FEATURES

Interactive graphics allow the student to move the hands of the clock by pressing the **B** and **F** keys.

**STUDENT PLANNING** records all student errors on the teacher's file for later review. The file will hold **40 records**. It may be cleared at any time, making room for additional records.

Design Options allow teachers to add or delete prompts for the student.

Appropriate for grades 2-5.

All Hartley courseware requires a  
48K Apple II\*, IIe\*, or IIc\*,  
or Franklin ACE 1000  
with one disk drive.

When using the Apple IIe or IIc, the  
CAPS LOCK key must be depressed.  
On the Franklin, the LOCK key.

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Dimondale, MI 48821

\*Apple II, IIe, and IIc are trademarks of APPLE COMPUTER, INC.

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### PURPOSE

This program was designed to provide the practice a student needs to convert between digital time and clock time. As a consequence of the popularity of digital clocks and watches, many children cannot read a regular (analog) clock! Three modes of practice are available. The fourth (tutorial) mode was added at the request of many teachers. Its purpose is to help the beginning user understand that there is a relationship between digital and analog time.

◆

This disk uses a high-speed operating system, Diversi-DOS<sup>TM</sup>, which is licensed for use with this program only. To legally use Diversi-DOS, you may send \$30.00 directly to DSR, Inc., 5848 Crampton Ct., Rockford, IL 61111. You will receive a Diversi-DOS utility disk with documentation.

◆

Test site schools available upon request.

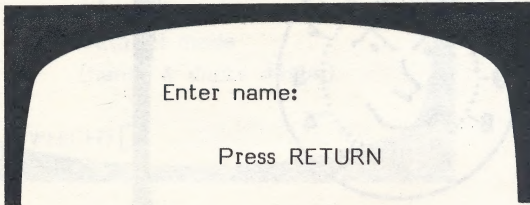
## CLOCK

### Quick Notes for OLD PRO'S

This disk will boot on a 3.3 Disk Operating System.

When running this program on the **APPLE IIe**, you must keep the **CAPS LOCK** key down. On the **Franklin ACE 1000**, the **LOCK** key.

To access the Teacher's MENU, type MENU when this screen appears:



To terminate the program before it is completed, type **ESC** when a response is called for. What the student had attempted to that point will be recorded.

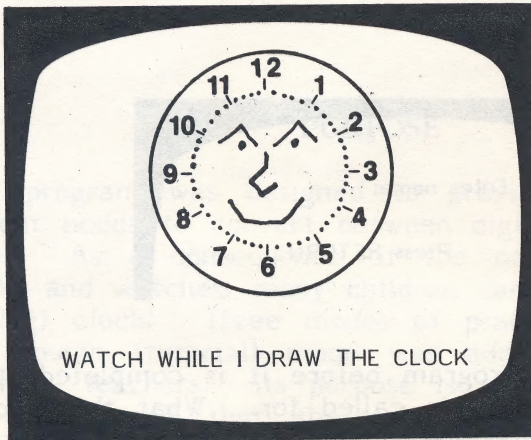
## RUNNING THE PROGRAM

Put the disk in Drive #1; close the small door. Turn on your computer. If you have an Apple II Plus, the disk will boot automatically when you turn on the computer.

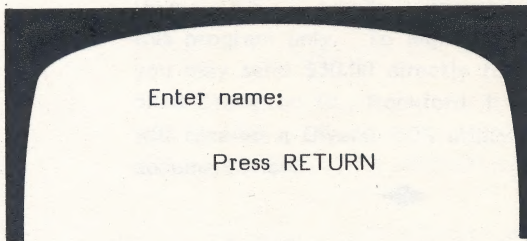
If you have an Apple II - Type **PR#6** press **RETURN**.

The program will load into your computer and run automatically - don't type CATALOG!

The credits will vanish and the screen will say:



After the clock is drawn, the screen will clear and



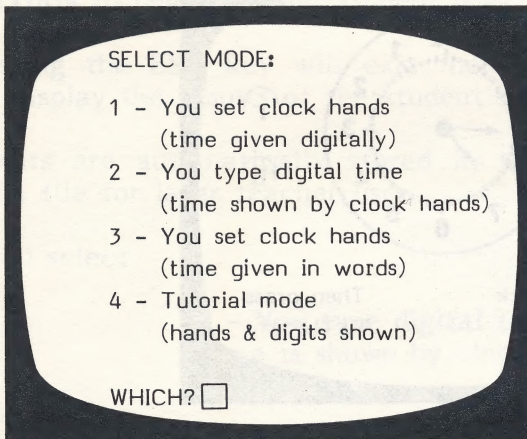
will appear.

The student should type his/her name. If the teacher wishes to see the student records, then type MENU when the name request appears. For further information, see the STUDENT PLANNING section of this manual.

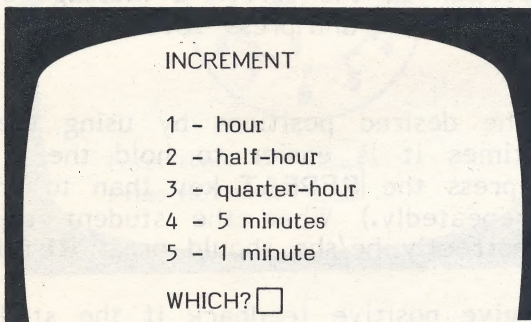
After the student's name is entered-

JOE press **RETURN**

The screen will clear and the following options will be displayed:



The student or teacher should select a mode and type the number (only the number), followed by **RETURN**. The screen will clear and you will be asked to select the increment.



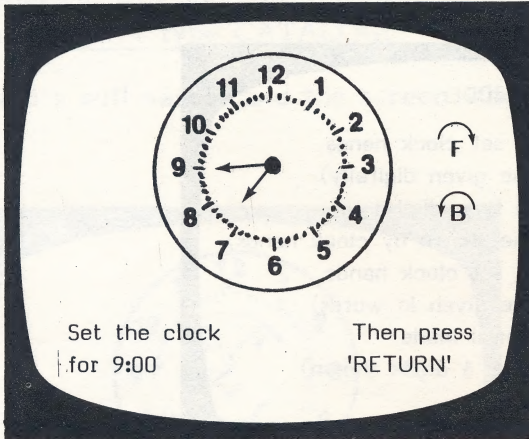
The problems will vary based on the increment and the hands on the screen will move according to the increment selected.

## USING THE DIFFERENT OPTIONS.

If you select

**1 - You set clock hands**  
(time is given digitally)

After selecting the time increment, a clock face appears.



Press the **F** to move the hands **forward**.  
Press the **B** to move the hands **backwards**.

### TRY IT!

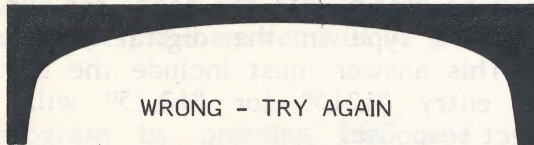
In the lower left portion of the screen a message such as- "Set the clock to show 8:00 and press 'return'." will appear.

Set the hands to the desired positions by using the **F** and **B** keys. (Sometimes it is easier to hold the **F** or **B** key down and depress the **REPEAT** key than to press the **F** or **B** key repeatedly.) When the student thinks the hands are set correctly he/she should press **RETURN**.

The computer will give positive feedback if the student is correct.

Press **RETURN** for the next problem.

If the answer is wrong, the following message will appear:



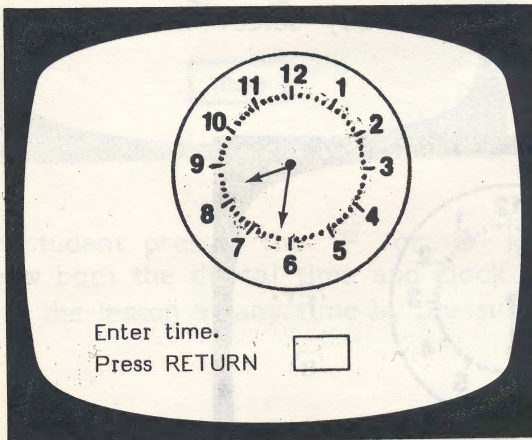
The same problem will be repeated. If it is missed a third time, the computer will "show" the student the answer by setting the hands to the correct position. Unless the lesson is stopped, 20 problems will be shown. The computer will display the student's results. Press **RETURN** to begin another student lesson.

Pressing the **ESC** key will exit the program at any point and display the results of the student's entries.

Results are automatically stored in the STUDENT PLAN-  
NING file for later teacher use.

If you select

**2 - You type digital time**  
(time is shown by clock hands)



The clock will be drawn with the hands set and the student will be asked to type in the digital expression of the time shown. This answer must include the colon correctly placed. The entry "1215" for "12:15" will be counted as an incorrect response.

As in Option 1, a correct response will result in a positive message to be displayed on the screen and an incorrect response will cause a "Wrong - try again." message to be displayed. After a correct response, press **RETURN** for the next problem. After an incorrect response, the same problem will be repeated. If the student misses the problem twice in a row, the computer will display the correct answer.

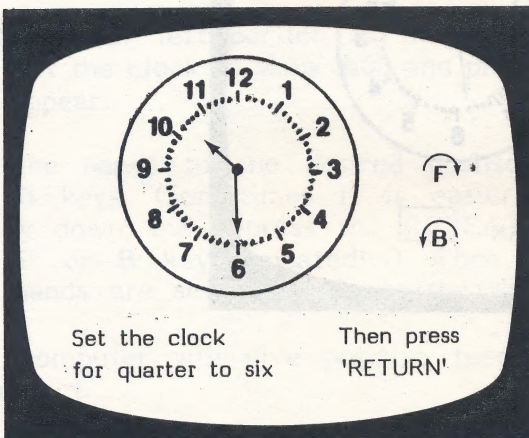
Pressing the **ESC** key will exit the program at any point and display the results of the student's entries.

Results are automatically stored in the STUDENT PLAN-  
NING file for later teacher use.

If you select

### 3 - You set clock hands (time is given in words)

the computer will automatically select the quarter hour increment.



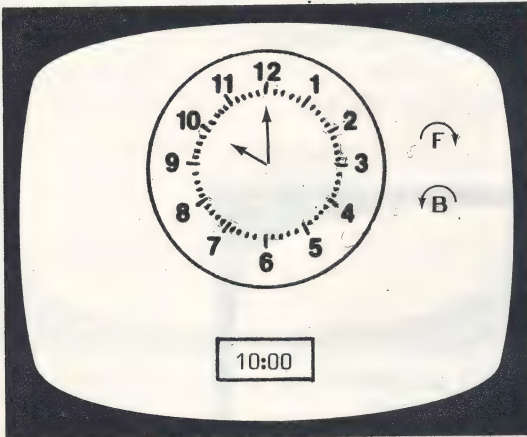
This option will run just like Options #1 and 2. After two incorrect attempts, the answer will be given.

Exiting the program by pressing **ESC** and storage of responses in the **STUDENT PLANNING** file are the same as for Options #1 and 2.

If you select

**4 - Tutorial mode**  
(hands and digits shown)

After you select the increment the following screen will be shown:



As the student presses the **F** or **B** key, the computer will show both the digital time and clock time. The student may end the lesson at any time by pressing **ESC**.

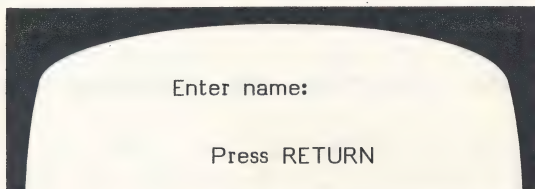
## THE TEACHER'S MENU

The lessons on this disk are for the student.

There are also programs for the teacher.

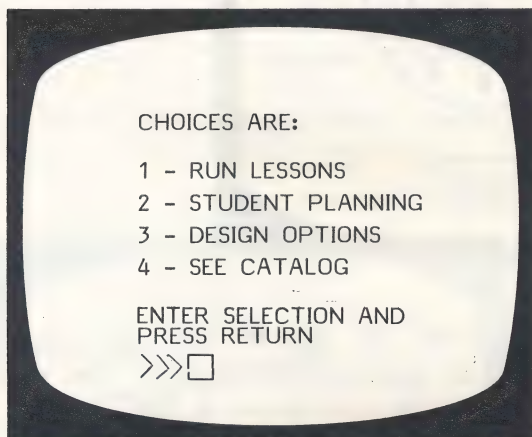
The teacher's programs may be accessed by using the name MENU.

When the following screen is shown:



type the word MENU, press **RETURN**.

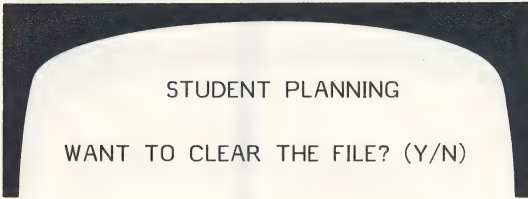
The following MENU will be shown.



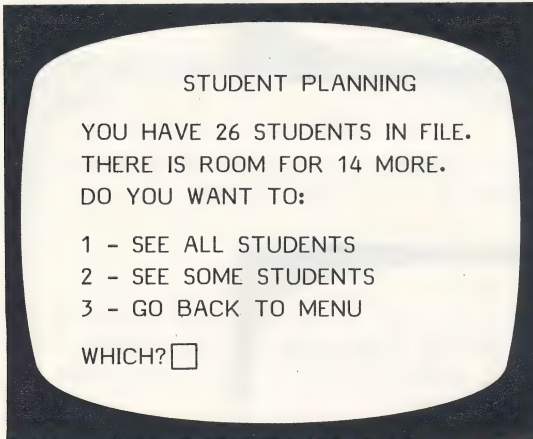
The following pages will describe how to use the programs on the teacher's MENU.

Select

**2 - STUDENT PLANNING** press **RETURN**

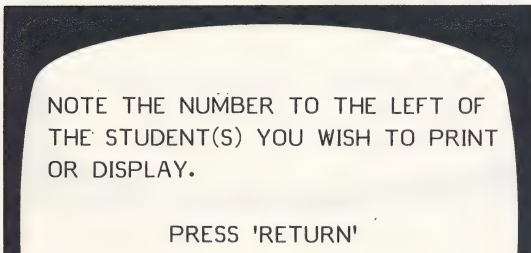


Type **N** if you want to see it; **Y** if you want to completely erase all student results. Press **RETURN**.

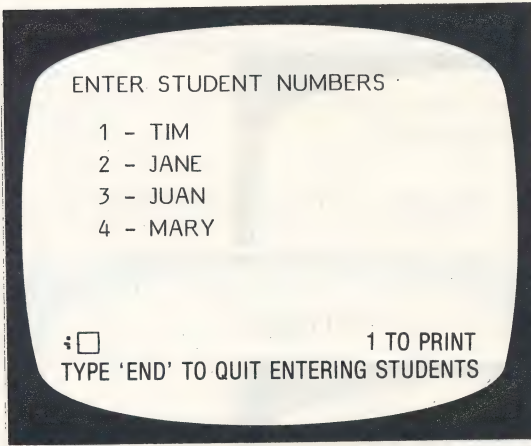


If you want to see only some of the students select

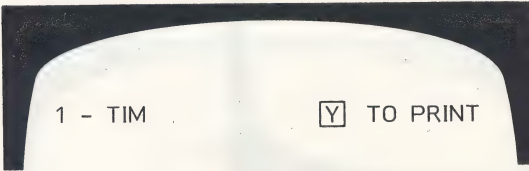
**2 - SEE SOME STUDENTS** Press **RETURN**.



As you select the students whose records you want to view, you will be typing just the number.

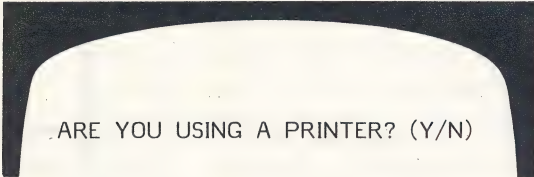


Type the number of a student you want to see and press **RETURN**. For Example: 2

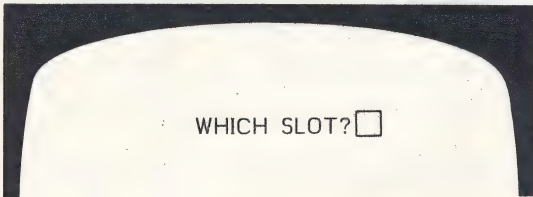


This frame gives you a chance to change your mind. If you want the record on the student, type **Y**.

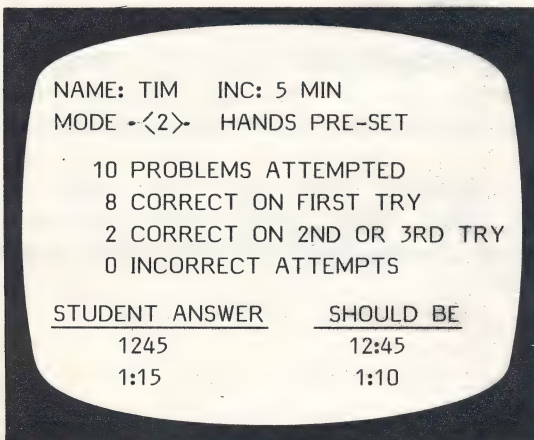
Continue selecting students whose records you want to see or print. The computer will keep a running tally on the number of students you have selected. When you have entered all the students you wish to review, type **END** (in place of another number). This frame will then appear:



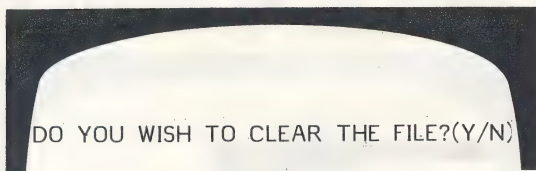
If you type **N**, the records will come up on the screen. If you type **Y**, you will then be asked:



It will usually be slot **1** or **2**. If you're not sure, take off the cover and check the printer card slot number. The printout will be in the following format:



After all information is displayed you will be asked:



Respond as desired.

The **ESC** key may be pressed at any time to terminate display or printout of student results. A maximum of 40 records can be stored in STUDENT PLANNING before the files must be emptied. To empty the response file answer **Y** to the question at the end of the display/printout.

A printer is nice to have with STUDENT PLANNING. This program is designed to accomodate a printer interface in any slot which can be accessed by the "PR#" command.

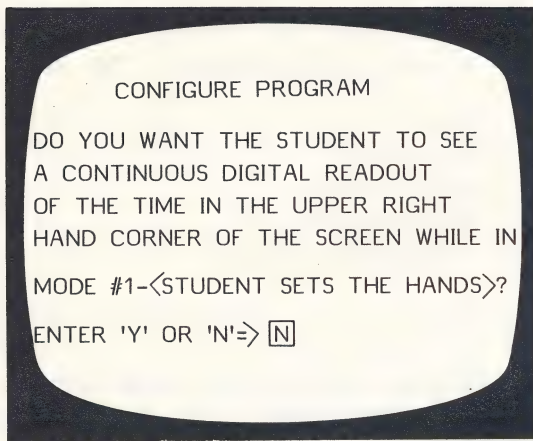
If you select

### 3 - DESIGN OPTIONS

This option allows the teacher to determine whether or not the digital time is displayed on the screen during the three different modes of drill.

If a child is just beginning to tell time, you may want the digital time shown in all of the various modes as a prompt. This is particularly true for Mode #1 and Mode #3.

In Mode #2, where the child must type the correct digital time, having it shown may be more of a prompt than you want to give.



This line changes to

Mode #2 - <student enters digital time> ?

and then to-

Mode #3 - <word problems - set hands>

A summary of choices is then shown and the teacher has the option to change the selections.

The disk is shipped with the following options:

Mode #1 - digital NOT shown

Mode #2 - digital NOT shown

Mode #3 - digital shown continuously

## INSTRUCTIONAL SKILL STATEMENTS

### Mode #1

Given digital time, the student will move the hands of a clock to represent the time to the nearest

- hour
- half-hour
- quarter-hour
- five minutes
- 1 minute

### Mode #2

Given a diagram of a clock with hands showing "clock time", the student will be able to write the corresponding digital time to the nearest

- hour
- half-hour
- quarter-hour
- five minutes
- 1 minute

### Mode #3

Given written expressions of time in 15 minute increments, the student can set the clock hands to the correct positions.

- hour (ten o'clock)
- half-hour (half past seven)
- quarter-hour (three fifteen)

### Mode #4

Given a diagram of a clock with hands showing "clock time" and the corresponding digital time, the student will practice moving the hands and watching the synchronized presentation of both indications of time.

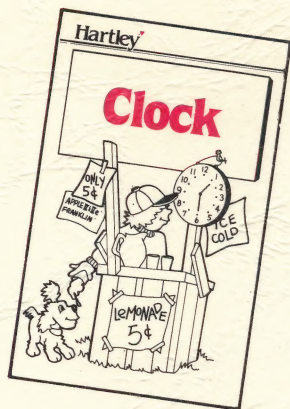
- hour
- half-hour
- quarter-hour
- five minutes
- 1 minute

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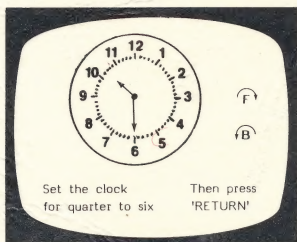
Appropriate for  
grades 1 - 5



**Learning to tell time made fun and easy! On our # 1 best seller list!**

This program teaches the relationship between digital time and "clock" time by means of a graphic clock. The student can actually move the hands clockwise and counterclockwise to set the clock to the time that is shown.

This excellent program includes 3 different types of problems at 5 different levels: hour, half-hour, quarter-hour, 5 minutes, and 1 minute.



**Design options** allow the teacher or parent to provide additional tutorial support to the student. **Recordkeeping** keeps track of 50 sessions.

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01-01

01-01 Clock

PINE LAKE ELEMENTARY SCHOOL  
**Hartley**  
MI 48130 30134



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01-01 Clock

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BACK-UP  
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