Hartley

Create Your Own
Lessons

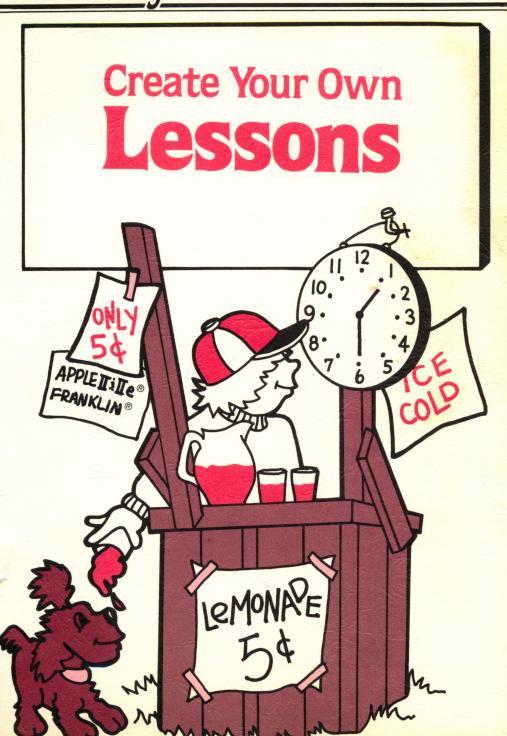ONLY
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Create-Your Own Lessons

PURPOSE

This disk was designed to provide teachers with the opportunity to use the capability of the computer without technical programming knowledge. The program allows the teacher to write tests, tutorials, or practice lessons. The lessons will provide immediate feedback to the student and complete recordkeeping for the teacher.

TEACHER'S GUIDE

Create Your Own-LESSONS

Appropriate for elementary students.

Test site schools available upon request.

This disk uses a high-speed operating system, Diversi-DOS[T.M.]; 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.
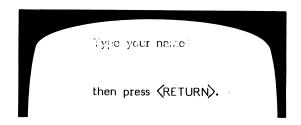
STARTING FROM SCRATCH
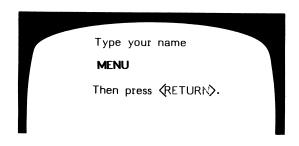
This disk will boot on a 3.3 Disk Operating System.

When running this program on the Apple IIe, you must keep the CAPS LOCK key down; the LOCK key on the Franklin ACE 1000.

Put the disk in Drive #1; close the door. Turn on your computer. If you are using an Apple II <u>Plus</u>, or Apple <u>IIe</u>, the disk will boot automatically when you turn on the computer.

If you have an Apple II, type **PR#6** and press **RETURN**. The program will load into you computer and run auto-matically - <u>don't type catalog!</u>

Type your name

then press ⟨RETURN⟩.

If you or a student were running the lessons, you would type in the name and press RETURN. However, you can't run lessons until you have written them! To put in your lessons, go directly to the Teacher's MENU. The teacher's programs are accessed by using the name **MENU** when the following screen is shown:

Type your name

MENU

Then press ⟨RETURN⟩.

The following MENU will be shown:

```
        38 FREE SECTORS>

  DO YOU WANT TO:

  1 - CREATE A NEW LESSON
  2 - CHANGE AN EXISTING LESSON
  3 - DELETE A LESSON
  4 - STUDENT PLANNING
  5 - RUN LESSONS
  6 - CATALOG DISK
  7 - PRINT OUT LESSONS
  WHICH?
```

This will
tell you
how much
space is
available.
One lesson
will take
10-20 sectors.

This MENU allows you to

1. Create your own lessons.
2. Make changes in those lessons after you have created them.
3. Delete a lesson. You may want to use this to get rid of an experimental lesson or to delete lessons your students have used to make room for new lessons. The disk will hold from 10 to 20 lessons, depending on the number of frames (instructions, questions, hints, explanations) in a lesson.
4. Check student results.
5. Return to the "Type your name." frame for the student to run the lesson.
6. See the "catalog" which will list the lessons you have created.
7. Print out the lessons you have created.

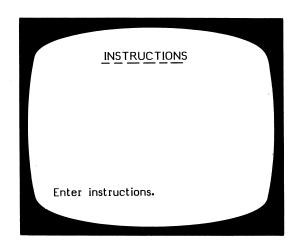The following pages will describe exactly how to use each of these programs on the Teacher's MENU.

Start by selecting the first option on the MENU.

1 - CREATE A NEW LESSON

After selecting 1, from the MENU, this frame is the first to appear:

You may enter
9 lines of
instructions.

To back up a
line or frame,
use the ← key.

INSTRUCTIONS

Enter instructions.

To capitalize a letter, press the ' ∧ ' just <u>before</u> the letter to be capitalized. To make a blank ___ in a question, use the '@' sign.

The Instruction frames may be accessed at any time by pressing 'H' when a response is called for.

Example of an
Instruction Frame:

INSTRUCTIONS

Integers are counting
numbers and zero.

0, 1, 2, 3 are
integers.
Integers may be positive
or negative or zero.

Enter instructions.

3

The first frame in the new lesson is presented.

#1
—

} You may enter
  6 lines here.

{ You may enter
  4 responses
  here; any one
  of these will
  be considered
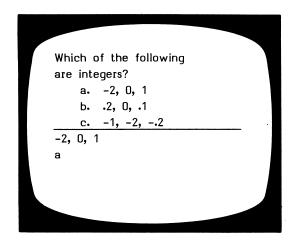 correct.

Information Frame
This frame requires
no response.

The **%** in the
answer's place will
indicate to the
computer that there
will be no answer.

☐☐☐   ☐☐   ☐☐☐
                    ☐☐

3   +   2   =   5
_____

Question Frame

These may take any format you would like.

```
Which of the following
are integers?
     a.  -2, 0, 1
     b.  .2, 0, .1
     c.  -1, -2, -.2
-2, 0, 1
a
```

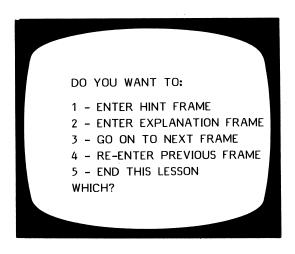The first answer recorded will be the answer shown to the child. All other answers will be accepted as correct.

Graphics and text.

```
How much is shaded?

[shaded blocks diagram]

a.  .4
b.  .3
c.  .5
.3
b
```
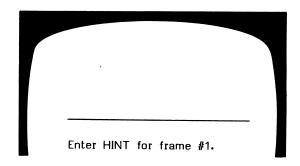
Many commonly requested 'shapes' have been stored in the computer. You may use these in your lessons just as if they were letters. The keys to use to create these shapes are listed on page 25.

After entering a question frame, you will be branched to this secondary MENU:

```
DO YOU WANT TO:

1 - ENTER HINT FRAME
2 - ENTER EXPLANATION FRAME
3 - GO ON TO NEXT FRAME
4 - RE-ENTER PREVIOUS FRAME
5 - END THIS LESSON
WHICH?
```

This allows you to enter a 'Hint' frame or an 'Explanation' Frame. The hint frame will be shown to the student after he misses the question. If you wish to enter a Hint frame for the first question, select 1 - **Enter hint frame** and this will appear:

You may enter 6 lines. Either text or graphics may be displayed.
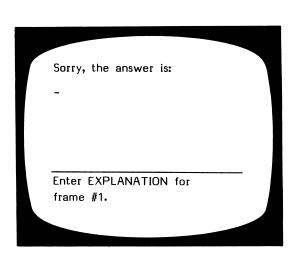
```
Enter HINT for frame #1.
```

After entering the hint frame, and pressing **RETURN,** the computer will automatically place you at Frame #2, ready to write the next question or information frame.

Select **2 – Enter explanation frame.** This would be used when a hint might not be appropriate, but you want to give the student feedback other than just the answer. The Explanation frame will be shown to the student after he has missed the question on his last try. (The number of tries is set by the teacher at the end of the lesson.)

You may enter 6 lines.

You may enter graphics or text.

```
Sorry, the answer is:

-



_____

Enter EXPLANATION for
frame #1.
```

3 – Go on to next frame

This simply allows you to go to the next consecutive frame without entering a hint or explanation frame for the previous frame.
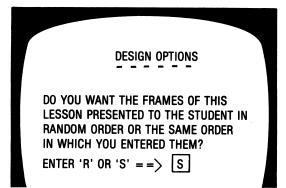
You may **4 – Re-enter Previous Frame** if you have given a hint frame and want to look at the question frame you just entered.

Selecting **5 – End This Lesson** will take you to the **DESIGN OPTIONS** for the lesson you have just entered. The first frame will ask you to enter the concept being taught, i.e.,
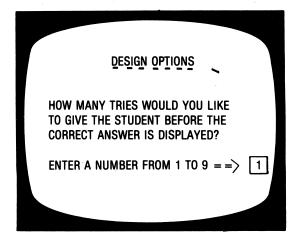
CONCEPT: COUNTING BY 2'S-3'S-4'S

This will be used in the Student Planning section.

The first of the Design Options will be given:

```
        DESIGN OPTIONS
        - - - - - -

DO YOU WANT THE FRAMES OF THIS
LESSON PRESENTED TO THE STUDENT IN
RANDOM ORDER OR THE SAME ORDER
IN WHICH YOU ENTERED THEM?
ENTER 'R' OR 'S' = =>  S
```

For instructional lessons that are carefully sequenced, you would want them presented in the same order. For drill or tests, you may want random order.

If you are using hint option, you will need at least 2 tries.

```
        DESIGN OPTIONS
        - - - - - -

HOW MANY TRIES WOULD YOU LIKE
TO GIVE THE STUDENT BEFORE THE
CORRECT ANSWER IS DISPLAYED?

ENTER A NUMBER FROM 1 TO 9 = => 1
```

The following 'Student Safeguards' allow you to set the criteria upon which the computer will branch to the end of the lesson. It is the philosophy of the teachers who designed this disk that if a lesson is too easy or too difficult, the computer should terminate the lesson. The TEACHER should make the new prescription.

STUDENT SAFEGUARDS

IF THE STUDENT IS DOING POORLY,
THE LESSON WILL TERMINATE IF HE/SHE
HAS LESS THAN 40% CORRECT ON THE
FIRST TRY.
(ENTER A NUMBER FROM 1 TO 49)

The next question relates to the above decision.

STUDENT SAFEGUARDS

EVEN IF THE STUDENT IS DOING
POORLY, AT LEAST☐ 4 FRAMES
WILL BE PRESENTED BEFORE THE
LESSON IS TERMINATED.
(ENTER A NUMBER FROM 1 TO 25)

You will need to skip at least some frames. If you don't,
the lesson will terminate on the first frame if there
is an error (0% will be below any % that you set in the
previous step).

```
   STUDENT SAFEGUARDS



   IF A STUDENT IS DOING WELL, THE
   LESSON WILL TERMINATE AFTER 10
   CONSECUTIVE CORRECT ANSWERS
   ON THE FIRST TRY.
   (ENTER A NUMBER FROM 1 TO 25)
```

If there is a variety of skills taught or reviewed in one lesson, you may want the student to complete all the work no matter how well he/she does on the first 10. If so, change to 25.

Note: By using the random order option and the Design Options, this disk was designed to allow you to create a modifiable item pool. Rather than drawing a specific number of items, the items will be used until the student meets the criteria you specified (in terms of the number of items in a row correct).

This type of criteria was considered preferable to a % because it takes into account the fact that the child may do poorly in the beginning but learn the concept during the lesson and begin to answer all items correctly.

```
DESIGN_OPTIONS


AFTER THE STUDENT HAS GONE THROUGH
ALL THE FRAMES IN A LESSON, DO YOU
WANT THE QUESTIONS HE/SHE MISSED TO
BE PRESENTED AGAIN?
ENTER "Y' OR 'N'  = => [Y]
```

The student safeguards
do not apply to these
questions. The authors
assumed the teacher
would want all missed
items reviewed.

```
DESIGN_OPTIONS


WHEN THE QUESTIONS ARE PRESENTED
AGAIN, HOW MANY TRIES WOULD YOU
LIKE TO GIVE THE STUDENT BEFORE
THE CORRECT ANSWER IS DISPLAYED?
ENTER A NUMBER FROM 1 TO 9 = => [1]
```

After the 'Design Options' and 'Student Safeguards' you will then be asked if you want to
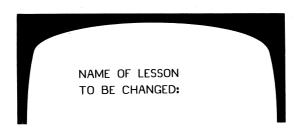
SAVE THIS LESSON? (Y/N)

You must then enter the LESSON NAME: Keep it short. Two or three letters is sufficient to identify the lesson. The comptuer will store your lesson and you will then be returned to the Main MENU.

2 - CHANGE AN EXISTING LESSON

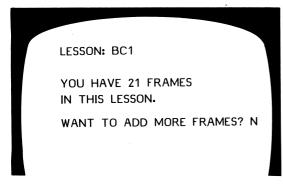If you wish to change a lesson that you have written, select 2 from the Main MENU.

First, you will need to identify the lesson you wish to change or add to.

```
NAME OF LESSON
TO BE CHANGED:
```

The lesson will be loaded into the computer and the following frame will appear:

```
LESSON: BC1

YOU HAVE 21 FRAMES
IN THIS LESSON.

WANT TO ADD MORE FRAMES? N
```

A lesson may have up to **30** frames.

If you want to increase the number of frames, type **Y.**
You will then be asked:

ADD HOW MANY FRAMES?

After indicating the number of frames you wish to add
to the lesson, the 'Instructions' frame will be shown
with the option of changing it by indicating **Y** or **N.**
If you answer **Y** the cursor will move to the first line
of the instructions. You may then type new instructions.
If you don't wish to change a line, just press **RETURN**
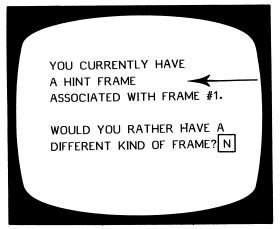to move the cursor to the next line.

Next, you will be shown the frame you wish to add.
(If the lesson already had 19 items, Frame #20 will appear
blank; the cursor on the first line, ready for you to type
in the item. After entering the item, you will then branch
to the secondary MENU (see page 6) so that you may
enter either a hint or explanation frame. When adding
frames to an existing lesson you cannot use **3 - Go on
to next frame** unless you have indicated that you are
adding more than one frame.

If you just wish to change some of the lessons and not
add new items, type **N** to the question:

<div align="center">ADD MORE FRAMES? (Y/N)</div>

You will be shown all the frames as they exist. If you
wish to change a line, type in the new line. If no change
is desired, press **RETURN** to go on to the next line.
Use the ⟵ key to back up to the preceding line or frame.
Use ⟶ key as a short cut to go from frame to frame.

After each question frame, one of these messages will appear:

YOU CURRENTLY HAVE
A HINT FRAME
ASSOCIATED WITH FRAME #1.

WOULD YOU RATHER HAVE A
DIFFERENT KIND OF FRAME? N

You may use
a Hint frame,
or Explanation
frame, or No
Extra Frame.

If you answer **N** and press **RETURN,** the computer takes you to the next frame for changing. (In this case, it would be the Hint frame for Frame #1.) If you reply **Y,** you will be branched to the secondary MENU (see page 6 for complete explanation of all items on this Menu), for your entry.

From this Menu you can:
    1 - add a hint frame,
    2 - add an explanation frame,
            or
      you can eliminate a hint frame by selecting
    3 - go on to next frame.

YOU CANNOT HAVE BOTH A HINT FRAME AND AN EXPLANATION FRAME FOR ONE QUESTION.

After you end this lesson, the computer automatically branches you to the Design Options as they were originally set, and you will be given the chance to change the Design Options if desired. Then the question:

SAVE THIS LESSON? (Y/N)

Type **Y** if you want the corrections to replace the lines that were in the original list. Type **N** if you have changed your mind about the corrections or additional frames, or did not make any.
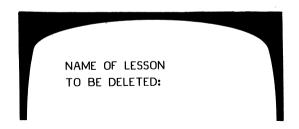
If you type **Y,** you will be given the chance to change the lesson name, if desired.

If you only want to change a few frames, you may branch to the end by typing 'END' and press **RETURN,** on the first line of a frame. These 3 letters will tell the computer to save only the changes up to that frame. The other frames in the lesson will remain the same.
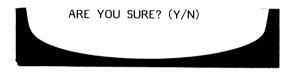
(Teachers are always unbelievers when it comes to this. Experiment with a lesson you don't want to keep-see how it works!)

3 - DELETE A LESSON

Bring up the Main MENU and select **3 - Delete a Lesson.**
This frame will appear:

```
NAME OF LESSON
TO BE DELETED:
```

Type the name of the lesson you want deleted and press
RETURN. You will be asked:

```
ARE YOU SURE? (Y/N)
```

If you reply **Y**, the lesson will be deleted. If you've
changed your mind, type **N** and the lesson will not be
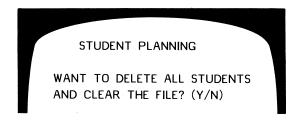deleted. If **N**, you will be returned to the Main MENU.

CAUTION: Be sure you want to delete a lesson--once
it's gone, you can't get it back unless you retype it in
by means of the Create a New Lesson program on the
Main MENU.

4 - STUDENT PLANNING

As a student works through a lesson, the errors that
he/she makes are recorded into the Student Planning
file. To see this file, bring up the Main MENU:

```
          ⟨38 FREE SECTORS⟩

     DO YOU WANT TO:

     1 - CREATE A NEW LESSON
     2 - CHANGE AN EXISTING LESSON
     3 - DELETE A LESSON
     4 - STUDENT PLANNING
     5 - RUN LESSONS
     6 - CATALOG DISK
     7 - PRINT OUT LESSONS
     WHICH?
```

and select **4 - Student Planning.** The first frame to
appear is:

```
          STUDENT PLANNING

     WANT TO DELETE ALL STUDENTS
     AND CLEAR THE FILE? (Y/N)
```

type **N** if you want to <u>see</u> the file; **Y** if you want to
completely <u>erase</u> <u>all</u> <u>student</u> <u>results.</u> Press **RETURN.**

17

If you typed **N,** indicating you would like to see the file and <u>not</u> erase it, this frame will appear:

```
YOU HAVE 4 STUDENTS IN FILE.
THERE IS ROOM FOR 46 MORE.

DO YOU WANT TO:
    1 - SEE ALL STUDENTS
    2 - SEE SOME STUDENTS
    3 - PRINT STUDENT SUMMARY
    4 - DELETE ALL STUDENTS
    5 - DELETE INDIVIDUAL STUDENTS
    6 - GO BACK TO MENU
    WHICH?
```

If you choose **1 - SEE ALL STUDENTS,** the computer asks:

ARE YOU USING A PRINTER? (Y/N)

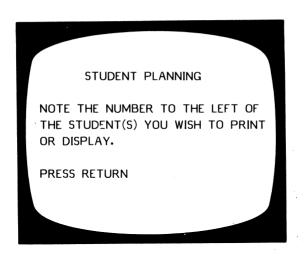If **Y,** it will ask for the slot. Then all records will be printed.

If you are not using a printer, results will be displayed on the screen. Scrolling of results is under control of the teacher.
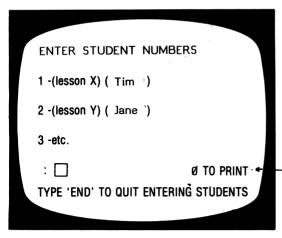
If you want to see only some of the students, select

2 - SEE SOME STUDENTS and press **RETURN.**

The frame on the following page appears.

STUDENT PLANNING

NOTE THE NUMBER TO THE LEFT OF
THE STUDENT(S) YOU WISH TO PRINT
OR DISPLAY.

PRESS RETURN

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

ENTER STUDENT NUMBERS

1 -(lesson X) (Tim)

2 -(lesson Y) (Jane)

3 -etc.

: ☐   Ø TO PRINT

TYPE 'END' TO QUIT ENTERING STUDENTS

The computer keeps a running tally on the number of students you have selected.
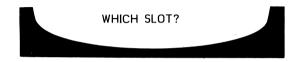
Type the number of a student you want to see and press **RETURN.** For example: If you type **2,** the lesson name and student name will appear at the bottom of the frame with a default value **Y** to indicate that is the student you wish to see. This gives you a chance to change your mind and enter **N** if you don't want to see that particular student.
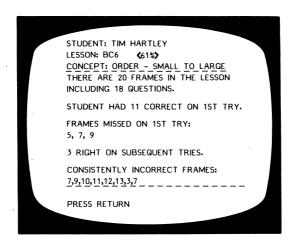
2 - (Lesson Y) (Jane J) [Y] TO PRINT

Continue selecting students whose records you want to see. When you have entered all of the students you wish to see, type **END** (in place of another number). This frame will appear:
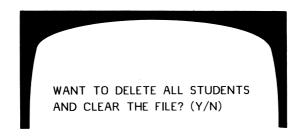
ARE YOU USING A PRINTER? (Y/N)

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

WHICH SLOT?

If will usually be **1** or **2.** If you are not sure, take off the cover and check. The printout will be in the following format:

```
STUDENT: TIM HARTLEY
LESSON: BC6    <61%>
CONCEPT: ORDER - SMALL TO LARGE
THERE ARE 20 FRAMES IN THE LESSON
INCLUDING 18 QUESTIONS.

STUDENT HAD 11 CORRECT ON 1ST TRY.

FRAMES MISSED ON 1ST TRY:
5, 7, 9

3 RIGHT ON SUBSEQUENT TRIES.

CONSISTENTLY INCORRECT FRAMES:
7,9,10,11,12,13,3,7 _ _ _ _ _ _ _ _ _ _ _ _

PRESS RETURN
```
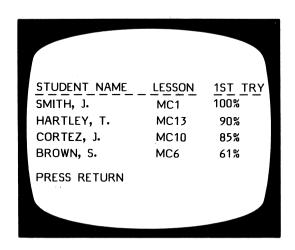
After all the information is displayed, you will be asked:

```
WANT TO DELETE ALL STUDENTS
AND CLEAR THE FILE? (Y/N)
```

Respond as desired.

The **ESC** key may be pressed at any time to terminate display or printout of student results. A maximum of **50** records can be stored in this Student Planning file before they must be emptied. To empty the file, answer **Y** to the question at the end of the display/printout, or use option **4** from the Student Planning Menu - **Delete all students.**

3 - PRINT STUDENT SUMMARY from the Student Planning MENU allows you to see or printout a summary of records for the entire class. The summary is in the following format:

```
STUDENT NAME     LESSON    1ST TRY
SMITH, J.          MC1       100%
HARTLEY, T.        MC13       90%
CORTEZ, J.         MC10       85%
BROWN, S.          MC6        61%

PRESS RETURN
```

The printout of the Student Summary will include <u>more</u> information than you can see on the screen. The printout includes: the skill statement and the number correct/number of questions.

STUDENT NAME	LESSON	1ST TRY	NUMBER CORRECT	SKILL
SMITH, J.	MC5	100%	20/20	ODD OR EVEN

4 - DELETE ALL STUDENTS

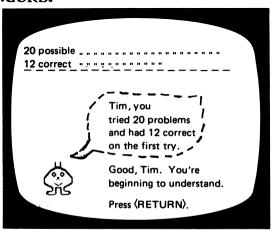If you want to clear all of your records, use this option.

5 - DELETE INDIVIDUAL STUDENT RECORDS

A number of teachers have asked for this option. This is most valuable when a variety of teachers are using the same disk. This allows you to print the records of just a few of your students and then erase only those selected records from the file.
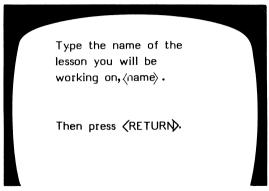
5 - RUN LESSONS

After you have created a lesson, go through it as a student. This will allow you to check the grammar, spelling, and format. It will also show you the way the student results are displayed and, of course, introduce you to GORB. GORB is a little graphic that 'tells' the student how well he/she did on the lesson just completed. He appears after all items have been completed or if a student escapes out of a program. He also appears as a reinforcer within the lessons.
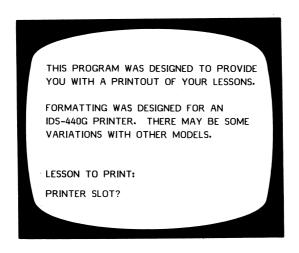
Introducing...GORB!

6 - CATALOG DISK

This file keeps a list of all lessons you have created. This file may also be accessed by typing ? when this frame appears:

7 - PRINT OUT LESSONS

```
THIS PROGRAM WAS DESIGNED TO PROVIDE
YOU WITH A PRINTOUT OF YOUR LESSONS.

FORMATTING WAS DESIGNED FOR AN
IDS-440G PRINTER.  THERE MAY BE SOME
VARIATIONS WITH OTHER MODELS.


LESSON TO PRINT:

PRINTER SLOT?
```

After indicating the lesson to be printed, and the slot your printer is in, a printout of the lesson indicated will be given.

Note: This will not print out a worksheet for the student.

The option to print out the lessons has been added to allow you to edit your lessons more easily.

The shapes are not *ASCII. They may, or may not print out. The ☐ may be shown as &8!

ASCII is a standard code when you type a letter. The printer prints a letter; when you type &8, the printer will not know to make the shape, it will just type &8!

CREATING SHAPES

To type the shapes on the screen, you need to use two keys. The combination of these two keys 'tell' the computer that you want a special shape.

You must always push the '&' sign before the next character to produce a symbol. i.e. (SHIFT) **&** then 1 = **x**

&1 = x

&2 = ÷

&3 = ≠

&4 = ℓ

&5 = °   degree

&6 = 2 ⎫
&7 = 3 ⎬ exponents

&8 = ☐ ⎫ These may be combined to develop
&9 = ▦ ⎭ simple decimal and fraction lessons.

&T = △

&Q = ◄—   These four may be combined to make a number line.

&W = —

&E = —+—

&R = —►

(SHIFT) **M** will give you a ♥ !
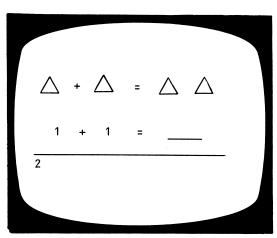
25

SUGGESTIONS FOR USE

This disk is a culmination of suggestions from teachers across the country who have been using other Hartley Create programs.

Although the limited room on the frames makes this disk most appropriate for elementary grades, some secondary teachers have used it effectively.
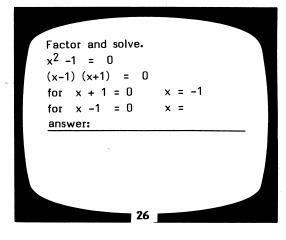
Drill & Practice

You may use the instructions followed by 30 questions. These may be randomly presented. The Design Options may be used to terminate the lesson when the student reaches the specified performance level.

Simple Math:
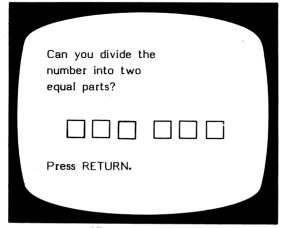

More complex equations:

Tutorials

By having students progress through the frames
in the same manner in which they were entered,
you can build a carefully sequenced tutorial,
complete with HINTS to guide your students
to the correct answer.

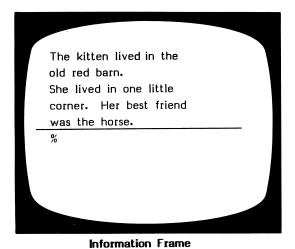Is 6 an even number?

Y/N

answer: –A

Sorry.

Press return for hint.

Question frame

Can you divide the
number into two
equal parts?

☐☐☐ ☐☐☐

Press RETURN.

Hint Frame

Simple Comprehension

If an information frame is followed by a question frame, the student can go back to the information frame by pressing the ← key.

```
The kitten lived in the
old red barn.
She lived in one little
corner.  Her best friend
was the horse.
%
```

Information Frame

```
Which is a fact?
   a.  The barn was red
   b.  The barn was big.
   c.  The barn was beautiful.
To see the story, use the ◄— .
   a
```

Question Frame

This program has also been used for such diverse things as:

 -teaching students to use the library.

 -working with LD students to develop
  sequencing skills .

 -matching vocabulary with definitions.

Any instructional sequence which could be more effectively presented with the information broken down into small steps would fit nicely on this disk.

Note: You can save lessons you have created only on a Create-LESSONS back-up disk. Simply use the **Change An Existing Lesson** file. Load the lesson into the computer. On the first line of the first frame shown, type 'END'. Go through the Design Options and when it asks you, "WANT SAVE THIS LESSON? (Y/N) SWITCH DISKS, and then say **YES!** You cannot save the lessons on a blank disk.

OWNER REGISTRATION CARD

Fill out this card and mail it immediately. This card will be used to notify you of program updates. The **version number is very important.** It will appear on the first screen when you load your program into the computer.

NAME_____
ADDRESS_____
CITY_____
STATE_____ZIP_____

IMPORTANT

PROGRAM NAME:_____

VERSION #: _____
(Boot your disk to see your version number.)

Hartley Courseware, Inc. Dimondale. MI 48821
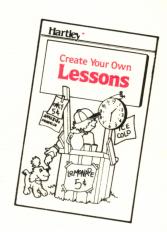
Hartley♥ Courseware, Inc.
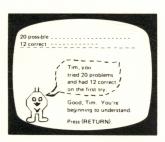
Dimondale, MI 48821

Create Your Own
Lessons

Elementary
(Special symbols make this program
particularly well-suited for mathematics.)

OUR NEWEST CREATE PROGRAM!

This program allows you to easily write your own tutorials, drills, or tests. Each lesson may begin with 9 lines of instruction followed by questions or additional instructional frames. Questions may be followed by HINT frames or EXPLANATIONS.

Ideas and suggestions from computer-using teachers all over the country have been used to develop this disk.

Questions may be random or sequential; students may return to instructional frames. The teacher sets the number of tries, and criteria for branching.

Large, upper/lower case letters, and recordkeeping (individual and class) are included.

This disk has special graphic symbols for ℓ, ° (degree), $<$, $>$, $=$, $-$, $+$, $\div$, $\times$, the exponents ² and ³, $\square$, $\blacksquare$, $\triangle$, and the number line.

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