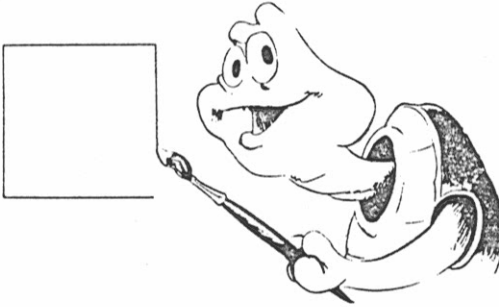*Good Work!*

Jeff Thompson
Rm 6
Grade 2

Lesson 4
Teaching the Turtle*
Procedures and Repeat

In Lesson 1 you drew a box (or square). To teach LOGO how to draw a box, type:

TO BOX (return)

The screen will change to black. LOGO is now in the Edit Mod TO BOX appears at the top. Type in these lines, pressing (retu: after each line.

```
FD 30
RT 90 FD 30
RT 90 FD 30
RT 90 FD 30
END
```
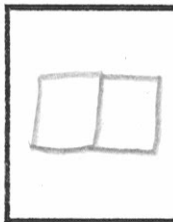
If this is ok, press the RUN/STOP key.
If you need to correct something, read "Comments about Editin in Appendix 1.

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Now type BOX (return).
LOGO has learned a new command, BOX.

1. Erase the screen (with DRAW).
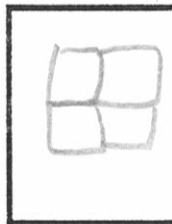   Copy the drawing the turtle makes.
   Type:

   BOX BOX (return)

2. Erase the screen, then type:

   REPEAT 4 [BOX]

Copy the drawing.

> When using REPEAT be sure to use
> brackets [ ] not parentheses.

3. Define two more procedures.

```
TO TRI1
FD 30
RT 120 FD 30
RT 120 FD 30
END
```

```
TO TRI2
FD 30
RT 135 FD 42
RT 135 FD 30
END
```

Press RUN/STOP to make LOGO accept the definitions. T
type either

or
```
TRI1 TRI1
REPEAT 2 [TRI1]
```

How many repeats give you a complete picture? Copy the
picture in the box.

REPEAT __4__ [TRI1]

Match

4. How many repeats with TRI2 give a complete picture? C
   the picture in the box.

   REPEAT _____[TRI2]

5. Define a procedure using the new procedures.

   TO SUPERTRI
   TRI1
   TRI2
   END

   Experiment with

   REPEAT _____[SUPERTRI]

See if you can find out how many repeats of SUPERTRI ma
complete design? _____ (This may be hard to tell.)

*If you have prepared a disk, you can save all these procedu
for later use. Insert your personal disk and type:

   SAVE "FIRST.SHAPES

See Appendix 2, to learn how to format a disk, save procedu
and read in procedures.