

## More Procedures – Extension Work Sheet 5

Using what the children have already learnt about drawing shapes, creating repeats and procedures, you could work towards writing a procedure to draw a simple house.

The house will consist of three windows, a door, and a roof.

The children could plan it on graph paper if they are finding this difficult.

In the example given, the main part of the house is drawn as a square:

```
To SQUARE  
  REPEAT 2 [FD 200 RT 90 FD 200 RT 90]
```

The roof a triangle:

```
To TRIANGLE  
  REPEAT 3 [FD 200 RT 120]
```

A rectangular door 90 high by 40 wide:

```
To DOOR  
  REPEAT 2 [FD 90 RT 90 FD 40 RT 90]
```

A small square window:

```
To SMALLWINDOW  
  REPEAT 4 [FD 50 RT 90]
```

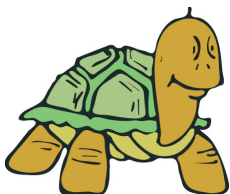
A large rectangular window:

```
To LARGEWINDOW  
  REPEAT 2 [FD 60 RT 90 FD 80 RT 90]
```

A procedure called HOUSE was then created:

```
To HOUSE  
  SQUARE  
  PENUP      (This now moves the turtle to the top  
  FD 200    right hand corner of the square ready  
  RT 90     to start drawing the TRIANGLE for the roof)  
  FD 200  
  LT 180  
  PENDOWN  
  TRIANGLE
```

Next the ground floor window and door are added by creating another routine, WINDOWDOOR



## Unit 4E: Modelling Effects on Screen

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To WINDOWDOOR

HOUSE

LT 90 (The turtle is now moved to the bottom of the  
SQAURE and positioned to draw in the door)

FD 200

RT 90

FD 80

RT 90

DOOR

LT 90 (The turtle is now moved across ready to draw

FD 100

in the ground floor window)

RT 90

PENUP

FD 30

PENDOWN

WINDOWSMALL

Finally we need to add in the windows on the upper floor, one large and one small.

We can use the whole of the previous routine, after having saved it, by simply calling 'WINDOWDOOR'

To FINISHHOUSE

WINDOWDOOR

PU (Moves the turtle ready to draw the first of the  
FD 80 upstairs windows)

PD

WINDOWLARGE

PU (Finally move the turtle to draw the last of the  
RT 90 upstairs windows)

FD 100

LT 90

FD 5

PD

WINDOWSMALL

