

Data worksheet—structure type

14 Oct 2010

Describe the data:

```
; alien          is a structure containing:
   STRUCTURE TYPE

;- posx          ( XCoord of the alien )
   PART 1 NAME      PART 1 TYPE, INTERPRETATION

;- posy          ( YCoord of the alien )
   PART 2 NAME      PART 2 TYPE, INTERPRETATION

;- type          ( Show the type of alien )
   PART 3 NAME      PART 3 TYPE, INTERPRETATION

   ..hp            (Show hit points that mean how many lasers
                    can be endured. 0 means died.)
```

```
(define-struct alien
  STRUCTURE TYPE

  ( posx      posy      type      hp
    PART 1 NAME PART 2 NAME PART 3 NAME ... ) )
```

; Examples:

```
(define ap-top-left      ; Plain alien on the top left edge
  EXAMPLE NAME            DESCRIPTION/EXPLANATION

  (make- alien      X_LEFT  Y_TOP  "plain"  1
    STRUCTURE TYPE      VALUE 1    VALUE 2    VALUE 3 ... ) )
```

```
(define ad-died-right-btm ; Died diver alien on the bottom right edge
  EXAMPLE NAME            DESCRIPTION/EXPLANATION

  (make- alien      X_RIGHT X_BOTTOM "diver"  0
    STRUCTURE TYPE      VALUE 1    VALUE 2    VALUE 3 ... ) )
```

```
(define as-middle-center ; Shielded alien on the middle center
  EXAMPLE NAME            DESCRIPTION/EXPLANATION

  (make- alien      X_CENTER Y_MIDDLE "shielded" 3
    STRUCTURE TYPE      -VALUE 1    VALUE 2    VALUE 3 ... ) )
```