

# Biorhythms

The theory of biorhythms assumes that the physical, emotional and intellectual capacities of an individual are subject to regular cycles of 23, 28 and 33 days respectively. During each cycle the curve will increase to a high point, then sink below the median value, tracing out a sine wave. These cycles commence at birth, and progress at different rates, producing crossovers, considered to signify 'critical' periods (days when the individual is more prone to accident or error of judgement) when the crossover is one involving the low values of the curves. Especially crucial are those days when all three curves meet. Positive high values at crossovers have a good effect.

The program calculates the cycles from the day of birth, and displays a graph of the curves for a period of one month from the chosen date.

```
10 REM BIORHYTHMS
20 REM ROBERT ERSKINE
30 MODE 1: BORDER 0: INK 0,0: INK 1,24: INK
2,20: INK 3,6: WINDOW #1,1,40,1,25: PAPER #
1,0: CLS #1
40 WINDOW #0,5,36,1,25: PAPER #0,0: PEN #0
,1: CLS #0
50 CLEAR: CLG: CLS
60 GOSUB 570
70 LOCATE 1,1: PRINT CHR$(24) "  B  I  O
R  H  Y  T  H  M  S  "; CHR$(24)
80 PEN 3: LOCATE 4,24: PRINT "ENTER DETAIL
S NOW (NUMERIC)": PEN 1
90 PEN 2: LOCATE 4,5: PRINT "BIRTH YEAR:";
: PEN 1: INPUT Y: LOCATE 15,5: PRINT CHR$(18
): LOCATE 15,5: PRINT Y; "
100 PEN 3: LOCATE 4,7: PRINT CHR$(18); "BIR
TH MONTH: "; : PEN 1: INPUT M$: IF M$ < "1" THE
N 100 ELSE M=VAL(M$): IF M < 1 OR M > 12 THEN
100
110 LOCATE 4,9: PRINT CHR$(18); "BIRTH DAY
:"; : PEN 1: INPUT D$: IF D$ < "1" THEN 110 EL
SE D=VAL(D$): IF D < 1 OR D > 31 THEN 110
120 LOCATE 4,9: PRINT "BIRTH DAY: "
```

```

130 PEN 3:LOCATE 4,12:PRINT"YEAR REQUIRE
D:";:PEN 1:INPUT Y1:LOCATE 18,12:PRINT C
HR$(18):LOCATE 18,12:PRINT Y1;"
140 PEN 2:LOCATE 4,14:PRINT CHR$(18);"MO
NTH REQUIRED:";:PEN 1:INPUT M$: IF M$<"1"
THEN 140 ELSE M1=VAL(M$): IF M1<1 OR M1>
12 THEN 140
150 LOCATE 4,16:PRINT CHR$(18);"DAY REQU
IRED:";:PEN 1:INPUT D$: IF D$<"1" THEN 15
0 ELSE D1=VAL(D$): IF D1<1 OR D1>31 THEN
150
160 TOTAL=(Y-1)*365.25
170 TOTAL2=(Y1-1)*365.25
180 IF M>1 THEN TOTAL=TOTAL+M(M-1)
190 IF M1>1 THEN TOTAL2=TOTAL2+M(M1-1)
200 IF M-1>1 AND Y/4=INT(Y/4) THEN TOTAL
=TOTAL+1
210 IF M1-1>1 AND Y/4=INT(Y/4) THEN TOTA
L2=TOTAL2+1
220 TOTAL=TOTAL+D:TOTAL2=TOTAL2+D1
230 DAY=TOTAL2-TOTAL1
240 IF M1=M AND D1=D THEN GOSUB 540
250 CLS
260 GOSUB 460
270 P=DAY-(INT(DAY/23)*23)
280 E=DAY-(INT(DAY/28)*28)
290 I=DAY-(INT(DAY/33)*33)
300 LOCATE 1,1:PRINT CHR$(24);"Physical
cycle";CHR$(24)
310 FOR N=P*C TO (P*C)+638
320 PLOT N-(P*C),(167+167*SIN(N/(11.5*PI
))),1
330 NEXT
340 PEN 2:LOCATE 1,1:PRINT"Emotional cyc
le":PEN 1
350 FOR N=E*C TO (E*C)+638
360 PLOT N-(E*C),(167+167*SIN(N/(14*PI))
),2
370 NEXT
380 PEN 3:LOCATE 1,1:PRINT"Intellectual
cycle":PEN 1
390 FOR N=I*C TO (I*C)+639
400 PLOT N-(I*C),(167+167*SIN(N/(16.5*PI
))),3

```

```
410 NEXT
420 LOCATE 1,1:PRINT CHR$(24);"BIORHYTHM
FOR      ";CHR$(24)
430 FOR X=1 TO 600:NEXT
440 PEN 2:LOCATE 6,10:PRINT"PRESS A KEY
TO RESTART":PEN 1
450 IF INKEY$="" THEN 450 ELSE 50
460 PRINT STRING$(32,32)
470 C=20
480 PEN 2:LOCATE 1,1:PRINT"DIVISIONS=DAY
S":PEN 1:FOR X=1 TO 1000:NEXT
490 FOR X=1 TO 70
500 PLOT C*X,1:DRAW 0,167*2,3
510 NEXT
520 PEN 2:LOCATE 19,1:PRINT MID$(STR$(D1
),2);"/";MID$(STR$(M1),2);"/";MID$(STR$(
Y1),2);"+":PEN 1
530 RETURN
540 REM
550 SOUND 1,220,4:SOUND 1,180,4:SOUND 1,
90,4:SOUND 1,220,4:SOUND 1,180,4:SOUND 1
,90,4:SOUND 1,220,4:SOUND 1,180,4:SOUND
1,90,4:SOUND 1,220,4:SOUND 1,180,4:SOUND
1,90,4:SOUND 1,220,4:SOUND 1,180,4:SOUN
D 1,90,4:SOUND 1,220,4:SOUND 1,180,4:SOU
ND 1,90,4
560 RETURN
570 RESTORE:DIM M(11)
580 FOR X=1 TO 11:READ N:M(X)=N:NEXT
590 DATA 31,49,90,120,151,181,212,243,27
3,304,334
600 RETURN
```