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100 REM Fun Factors - CPC only
110 REM By Eric Harper
120 REM
130 REM Re-coded by Ken Goodman
140 REM
150 REM (c) Computing with the Amstra
d
160 REM
170 MODE 0:BORDER 0
180 PAPER 11:CLS:PAPER 12:WINDOW 2,19
,2,24:CLS
190 PAPER 10:WINDOW 3,18,3,23:CLS:PAP
ER 0:WINDOW 4,17,4,22:CLS
200 a$="FACTORS":FOR i=0 TO 7:INK i,0
:NEXT
210 LOCATE 4,10:FOR i=1 TO 7:PEN i:PR
INT MID$(a$,i,1):NEXT
220 FOR z=1 TO 50:INK INT(RND*7)+1,IN
T(RND*26)+1
230 FOR d1=1 TO 60:NEXT:SOUND 1,20+IN
T(RND*10),3:NEXT
240 c=1:FOR i=6 TO 18 STEP 2:INK c,i:
c=c+1:NEXT
250 FOR d1=1 TO 2500:NEXT
260 REM
270 REM Define characters and
280 REM set start values.
290 REM
300 DEFINT a-z

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310 SYMBOL 240,17,17,241,17,159,132,1
32,132
320 SYMBOL 241,126,129,129,129,129,12
9,129,126
330 SYMBOL 242,66,66,126,66,66,66,126
,66
340 SYMBOL 243,60,126,255,255,255,255
,126,60
350 SYMBOL 244,28,62,99,65,65,99,62,2
8
360 SYMBOL 245,60,126,219,255,231,195
,126,60
370 ENV 1,1,127,1,50,-4,10:ENT 1,50,4
,1
380 MODE 1:GOSUB 1840
390 lives=3:sc=0:sh=1:w=2
400 WHILE lives>0
410 IF sc<350 THEN z=RND*100+1 ELSE I
F sc>=1000 THEN z=RND*300+1 ELSE z=RN
D*200+1
420 g=0:FOR i=1 TO 9:IF z/i<>INT(z/i)
THEN g=g+1
430 NEXT:MODE 0
440 INK 0,0:INK 1,26:INK 2,18:INK 3,2
6
450 INK 4,20:INK 6,20:INK 5,24:INK 7,
24
460 INK 8,8:INK 9,6:PAPER 0:BORDER 0:
CLS

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470 wall$=CHR$(240):ladder$=CHR$(242)
:balloon$=CHR$(243):rock$=CHR$(244):m
an$=CHR$(245)
480 REM
490 REM Draw the screen
500 REM
510 IF sc<1000 THEN GOSUB 1270 ELSE G
OSUB 1550
520 IF sc<350 THEN sh=1 ELSE IF sc>=3
50 AND sc<1000 THEN sh=2 ELSE sh=3
530 PEN 11:LOCATE 1,1:PRINT"Score"sc:
LOCATE 13,1:PRINT"Sheet"sh:LOCATE 6,3
:PRINT"NUMBER";z
540 REM
550 REM Starting positions
560 REM
570 PRINT CHR$(23)CHR$(1):TAB
580 ENV 1,1,127,1,50,-4,10
590 rx(1)=0:rx(2)=576:ry(1)=336:ry(2)
=336:dx(1)=32:dx(2)=-32:dy(1)=0:dy(2)
=0
600 FOR i=1 TO 2:PLOT 0,0,4:MOVE rx(i
),ry(i):PRINT rock$:NEXT
610 mx=96:my=16:PLOT 0,0,7:MOVE mx,my
:PRINT man$;
620 REM

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630 REM Move man and check progress
640 REM
650 j=0
660 IF j=0 THEN mh=0:mv=0
670 IF NOT INKEY(k1) THEN mh=-32:GOTO
710
680 IF NOT INKEY(k2) THEN mh=32: GOTO
710
690 IF NOT INKEY(k3) THEN mv=16:GOTO
730
700 IF NOT INKEY(k4) THEN mv=-16:GOTO
730
710 IF NOT INKEY(47) THEN GOSUB 2050
720 IF mh=0 AND mv=0 THEN 890
730 IF mx=64 AND my=16 AND mh=-32 THE
N 890
740 IF mx+mh<0 OR mx+mh>600 THEN mh=0
750 IF g<>0 AND mx=576 AND my=336 THE
N MOVE 0,352:PRINT"Non-factor/s misse
d";:FOR dl=1 TO 3500:NEXT:MOVE 0,352:
PRINT"Non-factor/s missed";
760 IF g<>0 AND mx=576 AND my=336 THE
N PLOT 0,0,7:MOVE mx,my:PRINT man$;:m
x=96:my=16:MOVE mx,my:PRINT man$;
770 IF g=0 AND mx=576 AND my=336 THEN
1030
780 IF TEST(mx+4,my+4)<>2 AND mv=16 T
HEN mv=0 ELSE IF TEST(mx+4,my-20)<>2
AND mv=-16 THEN mv=0
790 IF TEST(mx+4,my+4)=0 AND mv=16 TH
EN mv=0
800 IF TEST(mx+4,my-20)=2 AND TEST(mx
+4,my+4)=2 THEN mh=0
810 PLOT 0,0,7:MOVE mx,my:PRINT man$;
:mx=mx+mh:my=my+mv:MOVE mx,my:PRINT m
an$;:IF TEST(mx+16,my-2)=3 THEN 1220
820 IF my<>16 AND TEST(mx+4,my-19)=0
THEN WHILE TEST(mx+4,my-19)=0 AND my<
>16 :MOVE mx,my:PRINT man$;:my=my-16:
MOVE mx,my:PRINT man$;:WEND:GOTO 1230
830 IF sh=3 THEN f=0:GOSUB 2320 ELSE
f=0:GOSUB 2190
840 IF f<>0 AND TEST(mx+16,my+4)=9 TH
EN IF z/f=INT(z/f) THEN 1180
850 IF f<>0 AND TEST(mx+16,my+4)=9 TH
EN SOUND 1,22,5,15,0,0,15:g=g-1:PLOT
0,0,11:MOVE 160,398:PRINT sc;:sc=sc+5
0:MOVE 160,398:PRINT sc;:PLOT 0,0,9:M
OVE mx,my+15:PRINT balloon$;:PLOT 0,0
,4:MOVE mx-32,my+30:PRINT f;
860 REM
870 REM Move the rocks
880 REM
890 IF w=2 THEN w=1 ELSE w=2
900 IF TEST(rx(w)+6,ry(w)-19)=0 AND d
y(w)=0 AND ry(w)<>16 THEN ox(w)=dx(w)
:dx(w)=0:dy(w)=-64:SOUND 1,0,20,0,1,0

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,15:GOTO 950
910 IF dy(w)<>0 AND (TEST(rx(w)+6,ry(
w)-19)=1 OR ry(w)=16) THEN dx(w)=-ox(
w):dy(w)=0
920 IF ry(w)=16 THEN dx(w)=-32
930 IF rx(w)=64 AND ry(w)=16 THEN PLO
T 0,0,4:MOVE 64,16:PRINT rock$;
940 IF rx(w)=64 AND ry(w)=16 THEN IF
w=1 THEN rx(w)=0:ry(w)=336:dx(w)=32:d
y(w)=0:MOVE rx(w),ry(w):PRINT rock$;
ELSE rx(w)=576:ry(w)=336:dx(w)=-32:dy
(w)=0:MOVE rx(w),ry(w):PRINT rock$;
950 PLOT 0,0,4:MOVE rx(w),ry(w):PRINT
rock$;
960 rx(w)=rx(w)+dx(w):ry(w)=ry(w)+dy(
w):MOVE rx(w),ry(w):PRINT rock$;
970 flag=0:IF TEST(rx(w)+16,ry(w)-3)=
3 OR (rx(w)=mx AND ry(w)=my AND j=0)
THEN w=2:flag=-1
980 IF flag THEN 1220 ELSE IF j THEN
2110
990 IF j1 THEN 2120 ELSE 660
1000 REM
1010 REM We've made it!
1020 REM
1030 sc=sc+100:MOVE 0,352:PRINT"ALL F
ACTORS CORRECT";
1040 FOR dl=1 TO 4000:NEXT:CLS
1050 WEND
1060 REM
1070 REM End of game
1080 REM
1090 MODE 1:TAGOFF:INK 1,15:INK 2,24:
INK 3,16
1100 GOSUB 2460:PEN 1:LOCATE 9,7:PRIN
T"Your score was"sc:IF sc>hi THEN hi=
sc
1110 PEN 2:LOCATE 9,11:PRINT"You were
on sheet"sh:PEN 3:LOCATE 9,15:PRINT"
Hi-score"hi
1120 PEN 1:LOCATE 9,19:PRINT"Any more
(Y/N) ?":WHILE INKEY$<>"":WEND
1130 a$=UPPER$(INKEY$):IF a$="" THEN
1130
1140 IF a$="N" THEN MODE 1:END ELSE G
OTO 390
1150 REM
1160 REM Wrong factor
1170 REM
1180 lives=lives-1:MOVE 0,352:SOUND 1
,50,50,15,0,1:PRINT"WRONG-"f "IS A FA
CTOR";:FOR dl=1 TO 4000:NEXT:CLS:GOTO
400
1190 REM
1200 REM Collision
1210 REM
1220 MOVE 160,352:PRINT"COLLISION!";
1230 lives=lives-1:SOUND 1,50,50,15,0
,1:FOR dl=1 TO 4000:NEXT:CLS:GOTO 400

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1240 REM
1250 REM Draw screen 1
1260 REM
1270 PEN 0:PAPER 1:IF sc<350 THEN i=1
2 ELSE i=17
1280 RESTORE 1300:FOR r=1 TO i:READ x
1,y1,nn
1290 LOCATE x1,y1:PRINT STRING$(nn,wa
ll$);:NEXT
1300 DATA 1,6,13,15,6,6,2,10,18,12,12
,5,1,14,10
1310 DATA 12,14,9,8,16,3,12,16,5,2,18
,18,1,22,0
1320 DATA 10,22,6,17,22,4
1330 DATA 3,8,4,11,8,3,2,16,3,6,16,2,
4,20,4
1340 PEN 11:PAPER 0:LOCATE 3,25:PRINT
STRING$(18,CHR$(95));
1350 RESTORE 1370:PEN 2:PAPER 0:FOR i
=1 TO 7:READ y1,y2,x1
1360 FOR y=y1 TO y2:LOCATE x1,y:PRINT
ladder$;NEXT y,i

1370 DATA 5,9,7,9,13,12,13,17,14
1380 DATA 17,21,10,17,21,17,21,25,5,2
1,25,14
1390 PEN 9:FOR i=1 TO 9:READ x1,x2
1400 LOCATE x1,x2:PRINT balloon$;NEXT
1410 DATA 2,8,16,8,17,12,5,16,18,16
1420 DATA 3,20,19,20,8,24,15,24
1430 PEN 4:FOR i=1 TO 9:READ x1,x2,n$
1440 LOCATE x1,x2:PRINT n$;NEXT
1450 DATA 2,7,7,16,7,3,17,11,9,5,15,4
,18,15,6
1460 DATA 3,19,2,19,19,8,8,23,1,15,23
,5
1470 PEN 9:LOCATE 1,25:PRINT CHR$(143
)CHR$(143);
1480 PEN 8:FOR y=4 TO 5:LOCATE 20,y:P
RINT CHR$(241);:NEXT
1490 IF lives=0 THEN RETURN
1500 PEN 7:LOCATE 1,24:PRINT STRING$(
lives-1,man$);
1510 RETURN
1520 REM
1530 REM Draw screen 2
1540 REM
1550 PEN 0:PAPER 1:RESTORE 1580
1560 FOR r=1 TO 22:READ x1,y1,ns
1570 LOCATE x1,y1:PRINT STRING$(ns,wa
ll$);:NEXT

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1580 DATA 1,6,7,9,6,5,15,6,6,1,8,4,6,
8,2,15,8,6
1590 DATA 1,10,4,6,10,10,17,10,4,10,1
2,2,1,14,9,11,14,10
1600 DATA 4,16,5,13,16,8,1,18,2,4,18,
11,16,18,5,6,20,8
1610 DATA 1,22,8,10,22,2,13,22,8,6,24
,3
1620 PEN 11:PAPER 8:LOCATE 3,25:PRINT
STRING$(18,CHR$(95));
1630 PEN 2:FOR i=1 TO 13:READ y1,y2,x
1
1640 FOR y=y1 TO y2:LOCATE x1,y:PRINT
ladder$:NEXT NEXT
1650 DATA 5,9,6,5,9,18,9,13,4,9,13,7,
9,13,13
1660 DATA 9,13,17,13,17,2,13,17,11,13
,17,20
1670 DATA 17,21,7,17,21,19,21,25,4,21
,25,17
1680 PEN 9:FOR i=1 TO 10:READ x1,x2
1690 LOCATE x1,x2:PRINT balloon$:NEXT
1700 DATA 10,8,6,12,8,12,9,12,12,12
1710 DATA 15,12,9,16,12,16,5,20,14,20
1720 PEN 4:FOR i=1 TO 10:READ x1,x2,n
$
1730 LOCATE x1,x2:PRINT n$:NEXT
1740 DATA 10,7,1,6,11,9,8,11,6,9,11,1
,12,11,5
1750 DATA 15,11,8,9,15,7,12,15,4,5,19
,3,14,19,2
1760 PEN 9:LOCATE 1,25:PRINT CHR$(143
)CHR$(143);
1770 PEN 8:FOR y=4 TO 5:LOCATE 20,y:P
RINT CHR$(241);:NEXT
1780 IF lives=0 THEN RETURN
1790 PEN 7:LOCATE 1,24:PRINT STRING$(
lives-1,man$);
1800 RETURN
1810 REM
1820 REM Instructions
1830 REM
1840 INK 0,0:INK 1,24:INK 2,18:INK 3,
15:BORDER 0
1850 PEN 1:LOCATE 13,2:PRINT"FUN FACT
ORS
1860 PEN 2:LOCATE 1,6:PRINT" The com
puter will select a number and":PRINT
"you must decide which of the numbers
":PRINT"1 to 9 are factors (divide ex
actly into":PRINT"the number).
1870 PEN 3:PRINT:PRINT:PRINT" You ha
ve to burst the balloons of the":PRIN
T"non-factors by walking under them b
ut":PRINT"if you try to walk under th
e balloon":PRINT"of a factor you will
lose a life.

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1880 GOSUB 2480
1890 PEN 1:LOCATE 1,2:PRINT" You get
50 points for each balloon":PRINT"th
at you burst AND 100 points when you"
:PRINT"have found all the factors and
reached":PRINT"the 8 at the top. You
will THEN get a":PRINT"new number.
1900 PRINT:PRINT:PEN 2:PRINT" You al
so get a new number after":PRINT"losi
ng a life.":PRINT:PRINT" Score 350-5
HEET 2 and 650-SHEET 3
1910 PEN 3:PRINT:PRINT:PRINT" Use th
e keys to move your man":PRINT"around
the screen AND SPACE TO jump":PRINT"
over a rolling rock which is trying t
o":PRINT"destroy you.
1920 GOSUB 2480
1930 LOCATE 16,2:PEN 1:PRINT"KEYS
1940 LOCATE 5,5:PEN 2:PRINT"Which set
of keys do you prefer ?
1950 LOCATE 11,10:PEN 3:PRINT"1) The
arrow-keys":LOCATE 11,12:PRINT"2) Z a
nd X - Left and Right
1960 LOCATE 14,14:PRINT"J and \ - Up
and Down
1970 LOCATE 1,19:PEN 1:PRINT"To jump
a gap, press SPACE and either X or Y
together.
1980 a$=INKEY$
1990 IF a$="" OR (a$<>"1" AND a$<>"2"
) THEN 1980
2000 IF a$="1" THEN k1=8:k2=1:k3=0:k4
=2 ELSE k1=71:k2=63:k3=19:k4=22
2010 FOR d1=1 TO 500:NEXT:RETURN
2020 REM
2030 REM Jump, but keep rocks moving
2040 REM
2050 j=1
2060 IF TEST (mx+16,my+4)<>0 THEN j=0
:RETURN
2070 IF TEST(mx+4,my+4)=2 AND TEST(mx
+4,my-20)=2 THEN j=0:RETURN
2080 PLOT 0,0,7:MOVE mx,my:PRINT man$
;
2090 IF mx>512 OR mx<128 THEN mh=0
2100 MOVE mx+mh,my+16:PRINT man$;:FOR
rz=1 TO 3:GOTO 890
2110 NEXT:PLOT 0,0,7:MOVE mx+mh,my+16
:PRINT man$;:MOVE mx+mh+mh,my:PRINT m
an$;:mx=mx+mh+mh:j=0
2120 IF NOT INKEY(47) THEN j1=-1:GOTO
890
2130 j=0:j1=0:IF sh=3 THEN f=0:GOSUB
2320 ELSE f=0:GOSUB 2190
2140 IF f<>0 THEN 840
2150 RETURN
2160 REM
2170 REM Balloon on screen 1?
2180 REM

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2190 IF mx=32 AND my=272 THEN f=7:RET
URN
2200 IF mx=480 AND my=272 THEN f=3:RE
TURN
2210 IF mx=224 AND my=16 THEN f=1:RET
URN
2220 IF mx=512 AND my=208 THEN f=9:RE
TURN
2230 IF mx=128 AND my=144 THEN f=4:RE
TURN
2240 IF mx=544 AND my=144 THEN f=6:RE
TURN
2250 IF mx=64 AND my=80 THEN f=2:RETU
RN
2260 IF mx=576 AND my=80 THEN f=8:RET
URN
2270 IF mx=448 AND my=16 THEN f=5
2280 RETURN
2290 REM
2300 REM Balloon on screen 2?
2310 REM
2320 IF mx=288 AND my=272 THEN f=1:RE
TURN
2330 IF mx=160 AND my=208 THEN f=9:RE
TURN
2340 IF mx=224 AND my=208 THEN f=6:RE
TURN
2350 IF mx=256 AND my=208 THEN f=1:RE
TURN
2360 IF mx=352 AND my=208 THEN f=5:RE
TURN
2370 IF mx=448 AND my=208 THEN f=8:RE
TURN
2380 IF mx=256 AND my=144 THEN f=7:RE
TURN
2390 IF mx=352 AND my=144 THEN f=4:RE
TURN
2400 IF mx=128 AND my=80 THEN f=3:RET
URN
2410 IF mx=416 AND my=80 THEN f=2
2420 RETURN
2430 REM
2440 REM Jingle
2450 REM
2460 RESTORE 2470:FOR i=1 TO 8:READ t
p1,tp2,d:SOUND 17,tp1,d,15:SOUND 10,t
p2,d,15:NEXT:RETURN
2470 DATA 159,190,40,190,239,20,239,3
19,40,213,253,20,190,239,40,213,253,2
0,190,239,20,159,190,60
2480 LOCATE 12,23:PRINT"Press any key
"
2490 WHILE INKEY$<>"":WEND
2500 WHILE INKEY$="" :WEND
2510 CLS:RETURN
2520 a$=INKEY$:PRINT a$;
2530 IF a$<>"2" THEN 2520
2540 FOR d1=1 TO 1000:NEXT:GOTO 2520

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