

```
10 INK 0,0:MODE 0:PEN 15:INK 15,24,8:ENT -  
1,1,5,1:ENV 1,3,5,1,1,0,8,10,-1,10:ENV 2,3,  
4,1,1,0,8,10,-1,10:GOSUB 6000  
20 PRINT TAB(6) "ANIMATION"  
30 DEFINT x,y,r,h,w,d,n:x=75:y=351:r=39:til  
t=-PI/6:no=20:no2=3:GOSUB 1000  
40 x=595:y=369:r=29:tilt=-5*PI/4:no=10:no2  
=2:GOSUB 1000  
50 x=310:y=200:r=156:tilt=7*PI/6:no=25:no2  
=6:GOSUB 1000  
60 x=100:y=-116:r=351:tilt=0:no=50:no2=14:  
GOSUB 1000  
70 GOSUB 5000:GOSUB 3000  
80 INK 1,25:INK 2,10:ORIGIN 0,0  
90 FOR i%=9 TO 14:INK i%,0:NEXT  
100 SOUND 135,0:GOSUB 7010  
110 WHILE INKEY$=""  
120 FOR i%=3 TO 8  
130 j%=i%-1:IF j%=2 THEN j%=8  
140 INK j%,10:INK i%,25  
150 INK j%+6,0:INK i%+6,15  
160 FOR del=1 TO 100:NEXT  
170 NEXT  
180 WEND  
190 SPEED WRITE 1:SAVE "!animat.scn",b,&C00
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0,&3FFF
200 GOTO 110
1000 ' SPHERE SUBROUTINE
1010 ORIGIN x,y
1020 DEG:FOR phi=0 TO 180 STEP 360/(PI*(r*2
))*2
1030 PLOT r*SIN(phi),r*COS(phi),2:DRAW r*SI
N(360-phi),r*COS(360-phi),2:NEXT
1040 col%=3:RAD
1050 FOR phi=0 TO 3.1 STEP 3.1/no
1060 '
1070 h=r*COS(phi):w=r:d=0:alpha=PI/2+tilt:b
eta=PI/2:GOSUB 2000
1080 col%=col%+1:IF col%=9 THEN col%=3
1090 NEXT
1100 col%=1
1110 FOR theta=0.5 TO 2.5 STEP 2.5/no2
1120 h=-r/4*SIN(theta):w=r*SIN(theta):d=r*C
OS(theta):alpha=tilt:beta=1.5:GOSUB 2000
1130 NEXT
1140 RETURN
2000 ' ARC SUBROUTINE
2010 s=SIN(alpha):c=COS(alpha)
2020 x=w*SIN(beta):y=d+h*COS(beta)
2030 MOVE c*x+s*y,c*y-s*x
2040 FOR gamma=-beta TO beta+0.1 STEP 0.25
2050 x=-w*SIN(gamma):y=d+h*COS(gamma)
2060 DRAW c*x+s*y,c*y-s*x,col%
2070 NEXT
2080 RETURN
3000 ' PATH SUBROUTINE
3010 x=589:y=50:r=40:col%=9
3020 FOR tilt=0 TO 1.2 STEP 0.05
3030 GOSUB 4000
3040 x=0.9*x+39:y=0.5*y+170.5:r=r*0.92
3050 col%=col%+1:IF col%=15 THEN col%=9
3060 NEXT
3070 RETURN
4000 ' SQUARE SUBROUTINE
4010 ORIGIN x,y
4020 s=SIN(tilt):c=COS(tilt)
4030 MOVE r*(c+s),r*(c-s)
4040 DRAW r*(c-s),r*(-c-s),col%:DRAW r*(-c-
s),r*(s-c),col%
4050 DRAW r*(s-c),r*(c+s),col%:DRAW r*(c+s)
,r*(c-s),col%
4060 RETURN
5000 ' STARS SUBROUTINE
5010 ORIGIN 0,0
5020 FOR i%=0 TO 40
5030 x=639:y=9.5*i%:x1%=-2*(2+(INT(RND*2)+1
)):y1%=1-(INT(RND*3)):col%=(RND*6)+8
5040 WHILE x>=0:col%=col%+1:IF col%=15 THEN
col%=9
5050 p%=TEST (x,y):IF p%=0 THEN PLOT x,y,col
%
5060 x=x+x1%:y=y+y1%
5070 WEND
5080 NEXT
5090 RETURN
6000 ' music routine
6010 READ tone,length:IF tone=9999 THEN RES
TORE:GOTO 6010
6020 SOUND 1,tone,length,0,2:SOUND 2,tone/3
,length,0,1:SOUND 4,tone*2,length,0,2
6030 ON SQ(1) GOSUB 6010
6040 RETURN
6050 DATA 319,48,338,16,379,48,338,16,319,3
2,284,32,253,32,319,32
6060 DATA 239,32,253,32,284,32,319,32,338,3
2,379,32,338,32,426,32
6070 DATA 319,48,338,16,379,48,338,16,319,3
2,284,32,253,32,190,32
6080 DATA 213,16,253,48,284,48,253,16,319,9
6,0,32,0,250,9999,9999
7000 ' sound routine
7010 SOUND 7,RND*50+50,200,15,0,1
7020 ON SQ(1) GOSUB 7010
7030 RETURN

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