

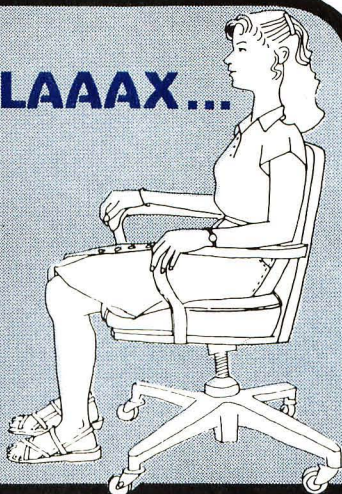
SoftSideTM Selections

Chemistry



Assistant

RELAAX...



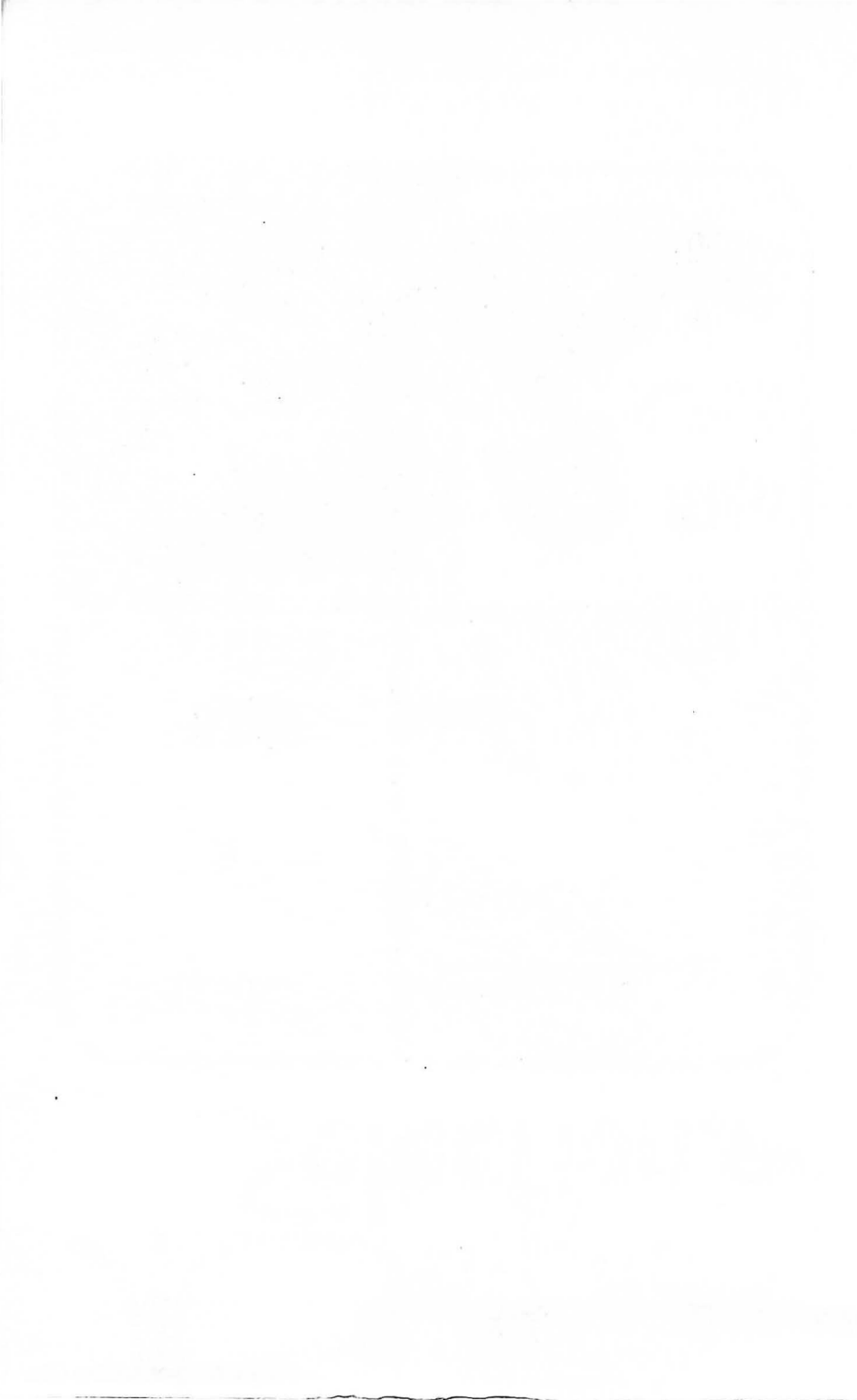
#43

*Math
Quiz*

**High
School**



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10 Northern Blvd., Amherst, NH 03031



SoftSideTM Selections

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Index



FRONT RUNNER: Relaaax...

by Peter J. Favaro

This program offers an easy, highly accessible system for relieving the tension that builds up after a long day at the computer, or over a hot stove cooking dinner for the family. After you learn how to use Relaaax..., you can exorcise tension whenever necessary

2



DV BONUS PROGRAM: Chemistry Assistant

by Art V. Cestaro III

If you hate to look up common chemistry formulas this program is for you. It makes changing grams to moles and finding density as much a piece of cake as calculating square roots, and frees you to solve the real problems of chemistry study

20



Math Quiz

by Jerry P. Wald

Math drills will become a liesure time activity when your child boots this program and plays his way to math facts mastery.....

23



ADVENTURE DISK and CASSETTE BONUS: SoftSide Adventure Series: High School

by David Pleacher

Anyone who ever went to high school knows what an adventure that was and is. Play the grade games and peer-group games, and wend your way through this simulation of one of lifes great adventures.....

30

General Information

and System Requirements 32

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—RELAAAX—

RELAAAX...

by Peter J. Favaro
with Richard M. O'Brien, Ph.D.

NOTE: Tape users should type in and swat the listings as shown and then when the swat codes match, make the following line changes:

Relax tape version line change.

```
270 IF R=ASC("R") THEN CLOSE #N1:POKE
559,N0:POKE 764,12:CLOAD
```

Review tape version line change.

```
280 IF R=ASC("E") THEN CLOSE #N1:POKE
559,N0:GRAPHICS N0:? "REWIND TAPE TO '
RELAX' & TYPE CLOAD":END
```



**Relaaax... is a recreational program for an Atari® with 32K RAM.
Review requires 24K RAM.**

Please read the instructions before booting up the program. Removing distractions and sources of tension, such as glare on the screen, is essential to successful results. Turn down the brightness on your monitor to reduce eyestrain.

If you spend hours and hours in front of your television set or monitor playing games, hacking away or telecommunicating (so who doesn't?), you probably leave those sessions with assorted aches and pains. They may be as mild as a slight headache or as serious as a stiff neck which lasts for days. Stress, color saturation, unnatural sitting positions, and fatigue are the likely culprits responsible for these annoyances, usually related to a straining of one or more muscle groups. A hot bath or a nice massage often is a good solution to these problems, but when they are impractical or unavailable you can use your computer (and *Relaaax...*) to help you relieve the tension it has helped to create. With this series of programs, you can learn to relax after any stressful situation likely to manifest itself in the muscles.

Nothing about relaxation training is magically curative. The effectiveness of any relaxation training method is related to how well the person involved can take instruction and *wants* to relax. The techniques presented in this series of programs are derived from hypnosis and behavioral relaxation procedures. *Relaaax...* has some advantages over both of them — you can do it in the privacy of your own home, in comfortable surroundings (or even at your terminal in your office) and it doesn't cost \$50 an hour.

Relaxation Theory and Practice

The actual techniques and text were derived from methods developed by psychologists Thomas C. Simek and Richard M. O'Brien, and presented in their book, *Total Golf* (Doubleday and Co.). They describe a uniquely interesting approach to improving your golf game: coupling the process of swinging the club with behavioral and psychological techniques such as relaxation training.

The theory is rather simple. When we experience stress, the muscles begin to ache. Relaxation cannot take place unless you learn to relax the muscles. This can, of course, be accomplished with drugs, by physically manipulating the muscles through massage, or by applying heat to the strained area. Another way to relieve muscular tension is by cueing yourself to focus on the changes you feel when you deliberately tense up and relax. Knowing what the body's response is, you can train yourself to respond to these cues consciously. When using this relaxation program, you will tense specific parts of your body in sequence. Then, sounds and pictures will cue you to relax these parts. By focusing on the different feelings produced in the tension cycle and in the relaxation cycle, and associating the relaxation response with the cues, you should be able to train yourself in a short time.

Beginning To Relax

Adequate preparation of yourself and the immediate environment is important. It could mean the difference between success and failure. First, remove any of the contributing causes of eye strain, such as bright lights. You should always practice the following precautions before any long computing session. They are extremely important to keep in mind when using this program:

- Make sure no glare is reflecting off your monitor. Sources can be either natural or artificial light — a nearby lamp, or sunlight from a window.
- Position yourself in front of the monitor so you don't have to tilt your head and cause strain on the neck muscles.
- Adjust the contrast and brightness on your screen so the colors are flat and uniform.
- Seat yourself in a chair that is firm, yet comfortable, preferably one with arms. Place your feet firmly on the floor.
- Position yourself two and one-half to three feet from your monitor.

You should be aware of three more precautions before you begin. First, if you wear hard contact lenses, please remove them. Second, if you have chronic back trouble or musculo-skeletal disease, talk to your physician before using this program. Last, you should not use this program if you have damaged your muscles through injury such as a pull, or a tear.

Relaaaxing...

The first thing you will see when you boot up the relaxation program is the initialization message. The screen will do nothing for thirty seconds or so. Next, the options menu will appear. Choice "E" stands for "Entire Program." It runs on 32K machines (the text uses a lot of memory), and is a tutorial to help you learn the instructions as you go along. The goal is to

teach you well enough so you don't have to read them every time you use the program. Four or five sessions are sufficient for most people. To the right of the text is a human figure. When the text explains which part of your body to focus on, the figure's corresponding muscle group lights up. The program organizes the muscles into four groups:

- Hands, Biceps and Triceps
- Forehead, Nasal Area and Mouth
- Neck, Shoulders and Stomach
- Thighs, Calves and Feet

A letter appears near the muscle group to remind you which particular muscle you are working on. All of this gradually weans you away from the text by cueing you.

Auditory cues reinforce these visual cues. Distinctly different pitches signal each of the main muscle groups. Then one, two or three higher pitches tell you whether you should work on the first, second or third muscle in the group. For instance, the tone for relaxing the hands is middle C, followed by a single tone of lower pitch, which tells you to work on the first group, first muscle. After using the program a few times, you will be able to sit in front of the computer with your eyes closed and cue yourself only by the tones.

The "R" option, "Review Sequence," presents the visual and auditory cues, but no text. This runs in 24K and is the option you should use after you have learned the basic instructions. Those who do not have enough memory to use the entire program can learn by looking at the pictures and captions in the printed magazine, and following the visual and auditory cues. With both the "R" and "E" options, the only contact you need to have with the computer is to tap the joystick in any direction to flip the text or drive the program. When the screen says "Tense," contract the muscle before you tap the stick.

AAAUUUMMM...

The "D" menu option is a program called the "Deep Breathing Trainer." Use it to develop a deep and rhythmic breathing pattern. Simply hold the joystick in your lap. As you exhale, move the stick forward; as you inhale move the stick back. Feedback on the screen is in the form of a graph. By watching the line peak and dip you can develop a deep and even breathing pattern. Try it!

Digital Seashore

The final option, "O", stands for "Ocean Sounds," a fancy white noise generator which simulates several beach and ocean sounds. Use this to help you conjure up relaxing images, or keep this program on low to help block out annoying "city sounds" or background sounds. White noise, like white light, is the presence of all frequencies in equal proportions. Its effect is to wash out, or mask, other sounds. Research suggests that white noise, and variations of it called pink noise, have a relaxing influence. Several department stores offer noise generators — at prices up to \$60 — that do much less than this program. Please keep the volume low on your television or external speaker — there's no need to tense yourself up with thundering ocean sounds after you've just relaxed. Aim for the sound of the tide coming in, rather than a storm at sea.

Self-Suggestion

Self-suggestion is an important part of these programs. When using the relaxation training program you will notice a grey bar at the bottom of the screen. During the relaxation phase of the exercises, you should concentrate your attention on the bar. As the bar gradually fades into the background, repeat positive statements to yourself. Let your body become more and more relaxed as the bar gets darker and darker. With each decreasing shade of intensity let yourself feel looser and limper. You may need some practice, but you will find self-suggestion an essential part of using the relaxation program.

I won't go into detail about the programs themselves, since they all utilize elementary programming techniques which are described in *SoftSide's* tutorial articles. If you are interested in any of the sound generation techniques, the character set graphics or bit-mapping used in the deep breathing program, write to me at *SoftSide* and I'll be glad to help you if I can. Enjoy the *Relaxation Training System*, and look for modifications and enhancements in future issues.

Peter J. Favaro is a school psychologist and will receive his doctorate in School and Clinical Psychology from Hofstra University in August. He also teaches psychology at Hofstra and is an educational and recreational video game design consultant.

Richard M. O'Brien, Ph.D. is a clinical psychologist and professor of psychology at Hofstra University. He has worked extensively in the areas of industrial and sports psychology and is the author of *Total Golf* (Doubleday and Co.) as well as *Industrial Behavior Modification: A Learning Based Approach to Business Management* (Doubleday and Co.).

Variables

B: Location of alternate character set.

B: Location of alt. character set.

BL: Variable which holds the number of times to print blank lines to erase text.

D: Causes tone to ring N number of times.

DELAY: Variable controlling fade of timer bar.

DL: Tone envelope for auditory cues.

DX, DY: Coordinates of chart.

E2, E3: Number of bytes to output to the screen.

ND: Clears sound register 0.

PSE: Delay to keep title page on screen and delay loop variable.

R: Response from menu choice, machine-language scroll routine, and one of five random "wave" sounds.

S\$, TXT\$, A, B, CBASE, I, MM,

MN: Variables which allocate memory for character set and define character set via string techniques.

SA: Start address of screen write memory.

ST: Joystick zero.

START: Bit map variable.

STRIG (N0): Joystick (0) trigger.

TIME: Length of time to sound "wave."

TIMES: Number of times to plot a star.

X, Y: Coordinates of X axis.

```

SS SS SS SS SS SS SS SS SS SS
SS                                     SS
SS      Atari BASIC                  SS
SS      'Relax'                      SS
SS  Authors: Peter J. Favaro        SS
SS  Richard M. O'Brien, Ph.D.      SS
SS      Copyright © 1983            SS
SS  SoftSide Publications, Inc      SS
SS                                     SS
SS SS SS SS SS SS SS SS SS SS SS

```

If you don't wish to type this program, it is available on Issue #43 SoftSide DV and CV.

```

100 ? CHR$(125):? "INITIALIZING, ONE M
    OMENT PLEASE":N0=0:N1=1:N2=2:N6=6:N7=7
    :N8=8:N16=16:N17=17:N2210=2210
110 N2320=2320:N2340=2340:DIM S$(1024)
    ,TXT$(1):A=ADR(S$):B=INT(A/512+N1)*N2:
    CBASE=B*256-A+N1:S$(N1)=CHR$(N0)
120 S$(1024)=CHR$(N0):S$(N2)=S$(N1):FO
    R I=N0 TO 511:S$(CBASE+I,CBASE+I)=CHR$
    (PEEK(I+57344)):NEXT I
130 RESTORE :FOR I=N0 TO 41:READ R:POKE
    1664+I,R:NEXT I:MM=24:NN=31
140 IF MM>120 THEN 160
150 FOR I=MM TO NN:READ N:S$(I+CBASE,I
    +CBASE)=CHR$(N):NEXT I:MM=MM+N8:NN=NN+
    N8:GOTO 140
160 MM=208:NN=215
170 IF MM>256 THEN 190
180 FOR I=MM TO NN:READ N:S$(I+CBASE,I
    +CBASE)=CHR$(N):NEXT I:MM=MM+N8:NN=NN+
    N8:GOTO 170
190 MM=464:NN=471
200 IF MM>479 THEN 220
210 FOR I=MM TO NN:READ N:S$(I+CBASE,I
    +CBASE)=CHR$(N):NEXT I:MM=MM+N8:NN=NN+
    N8:GOTO 200
220 REM
230 GRAPHICS 18:POKE 756,B:SETCOLOR NO
    ,N0,N6:POSITION N1,N0: ? #N6;"RELAXATIO
    N TRAINER":? #N6;" >>>OPTIONS MENU>>>"
240 ? #N6;" 0000000000000000":? #N6;
    " r REVIEW SEQUENCE":? #N6;" e ENTIRE
    PROGRAM":? #N6;" d DEEP BREATHING"
250 ? #N6;" TRAINER":? #N6;" o OCEAN
    SOUNDS":? #N6: ? #N6;" 00000000000000
    000":? #N6;" ENTER CHOICE"

```

```

260 CLOSE #N1:OPEN #N1,4,N0,"K":GET #N
    1,R:IF R=ASC("E") THEN CLOSE #N1:GOTO
    300
270 IF R=ASC("R") THEN CLOSE #N1:POKE
    559,N0:RUN "D:REVIEW"
280 IF R=ASC("D") THEN CLOSE #N1:GOTO
    2370
290 IF R=ASC("O") THEN CLOSE #N1:GOTO
    2570
300 REM
310 GRAPHICS 18:POKE 756,B:SETCOLOR NO
    ,4,N8:SETCOLOR N1,4,N6:SETCOLOR N2,N0,
    N6:POSITION 9,3: ? #N6;"#"
320 POSITION N8,4: ? #N6;"%$&":POSITION
    N8,5: ? #N6;"'(){}":POSITION N8,N6: ? #N
    6;"+-":POSITION 9,N7: ? #N6;"./"
330 POSITION N8,N8: ? #N6;"<":POSITIO
    N N1,N0: ? #N6;"relaxation trainer":? #
    N6: ? #N6;" FULL RELAXATION"
340 POSITION N6,10: ? #N6;"PROGRAM":? #
    N6;" =====":FOR PSE=N1 TO
    1500:NEXT PSE
350 GRAPHICS 18:SETCOLOR NO,N0,N6:POSI
    TION N2,N2: ? #N6;"THIS PROGRAM IS":? #
    N6: ? #N6;" DESIGNED TO HELP"
360 ? #N6: ? #N6;" YOU LEARN TO RELAX."
    :GOSUB N2210:GOSUB 2330
370 POSITION 4,N2: ? #N6;"PLEASE READ":
    ? #N6: ? #N6;" THE DOCUMENTATION":? #N
    6: ? #N6;" BEFORE ATTEMPTING"
380 POSITION 5,N8: ? #N6;"TO USE IT.":G
    OSUB N2210:GOSUB 2330

```





390 POSITION 5,5: ? #N6; "LET'S BEGIN": G
OSUB N2210:GOSUB 2330
400 GRAPHICS 18:PDKE 756,B:SETCOLOR N2
,4,N8:SETCOLOR NO,N0,N6:GOSUB 2300:GOS
UB 1950
410 POSITION N1,N1: ? #N6; "FIRST LET US
": ? #N6: ? #N6; " BECOME FAMILIAR": ? #N6
: ? #N6; " WITH THE"
420 ? #N6: ? #N6; " SCREEN": GOSUB N2210
:GOSUB 2310:POSITION N1,N1: ? #N6; "ON T
HE RIGHT": ? #N6: ? #N6; " SIDE OF THE"
430 ? #N6: ? #N6; " SCREEN THERE": ? #N6:
? #N6; " IS A FIGURE": GOSUB N2210:GOSU
B 2310
440 POSITION N1,N1: ? #N6; "TEXT WILL": ?
#N6: ? #N6; " APPEAR TO THE": ? #N6: ? #N
6; " LEFT OF THE"
450 ? #N6: ? #N6; " FIGURE": GOSUB N2210
:GOSUB 2310:POSITION N1,N1: ? #N6; "AT T
HE BOTTOM"
460 ? #N6: ? #N6; " OF THE SCREEN": ? #N6
: ? #N6; " THERE IS A": ? #N6: ? #N6; " GRE
Y TIMER BAR": GOSUB N2210:GOSUB 2310
470 POSITION N1,N1: ? #N6; "THE FIRST FE
W": ? #N6: ? #N6; " TIMES THAT YOU": ? #N6
: ? #N6; " USE THIS"
480 ? #N6: ? #N6; " PROGRAM YOU": ? #N6: ?
#N6; " WILL NEED TO": GOSUB N2210:GOSUB
2310
490 POSITION N1,N1: ? #N6; "PAY CLOSE": ?
#N6: ? #N6; " ATTENTION TO": ? #N6: ? #N6
; " THE TEXT?"

500 ? #N6: ? #N6; " AFTER A WHILE": ? #N6
: ? #N6; " YOU WILL LEARN": GOSUB N2210:G
OSUB 2310
510 POSITION N1,N1: ? #N6; "THE RELAXATI
ON": ? #N6: ? #N6; " INSTRUCTIONS": ? #N6:
? #N6; " AND YOU WILL"
520 ? #N6: ? #N6; " ONLY NEED TO": ? #N6:
? #N6; " LOOK AT THE": GOSUB N2210:GOSUB
2310
530 POSITION N1,N1: ? #N6; "FIGURE AND":
? #N6: ? #N6; " LISTEN TO THE": ? #N6: ? #
N6; " AUDITORY CUES"
540 ? #N6: ? #N6; " TO DO THE": ? #N6: ? #
N6; " EXERCISES": GOSUB N2210:GOSUB 231
0:POSITION N1,N1: ? #N6; "TO PREPARE"
550 ? #N6: ? #N6; " TRY TO": ? #N6: ? #N6;
" IMAGINE A": ? #N6: ? #N6; " TRANQUIL": ?
#N6: ? #N6; " SCENE?"
560 GOSUB N2210:GOSUB 2310:POSITION N1
,N1: ? #N6; "CONCENTRATE": ? #N6: ? #N6;
ON THIS"
570 ? #N6: ? #N6; " SCENE AND": GOSUB N22
10:GOSUB 2310:POSITION N1,N1: ? #N6; "ON
YOUR": ? #N6: ? #N6; " BREATHING SO"
580 ? #N6: ? #N6; " IT IS DEEP": ? #N6: ?
#N6; " AND RHYTHMIC": GOSUB N2210:GOSUB
2310
590 POSITION N1,N1: ? #N6; "CLOSE YOUR":
? #N6: ? #N6; " EYES AND " : ? #N6: ? #N6;
" THEN OPEN"
600 ? #N6: ? #N6; " THEM AGAIN AT": ? #N6
: ? #N6; " THE TONE?"
610 GOSUB N2210:GOSUB 2310:GOSUB N2340
:GOSUB 2300:SETCOLOR NO,N0,N6:POSITION
N1,N1: ? #N6; "THE FIRST "
620 ? #N6; " MUSCLE GROUP": ? #N6: ? #N6;
" YOU WILL RELAX": ? #N6: ? #N6; " IS THE
": GOSUB N2210:GOSUB 2310
630 POSITION N1,N1: ? #N6; "HANDS BICEPS
": ? #N6: ? #N6; " AND TRICEPS": ? #N6: ?
#N6; " GROUP?"
640 POSITION N16,4: ? #N6; "X": POSITION
N16,5: ? #N6; "": POSITION N16,N6: ? #N6;
"+"
650 POSITION 18,4: ? #N6; "&": POSITION 1
8,5: ? #N6; "): ? #N6; "": GOSUB N2210
660 GOSUB N2320:POSITION N1,N1: ? #N6; "
THIS TONE WILL": ? #N6: ? #N6; " SIGNAL Y
OU TO": ? #N6: ? #N6; " PREPARE TO"

RELAAAX

670 ? #N6:? #N6;" RELAX THIS":? #N6:? #N6;" GROUP?":GOSUB N2210:GOSUB N2320:GOSUB 2290

680 POSITION N1,N1:? #N6;"BEGIN WITH T HE":? #N6:? #N6;" HANDS? THIS":? #N6:? #N6;" TONE SIGNALS"

690 ? #N6:? #N6;" YOU TO FOCUS":? #N6:? #N6;" ON YOUR HANDS?":POSITION 15,N6 :? #N6;"h":GOSUB N2210

700 GOSUB N2320:GOSUB 2290:GOSUB 2280: POSITION N1,N1:? #N6;"TENSE THE HANDS" :? #N6:? #N6;" AND WRISTS BY"

710 ? #N6:? #N6;" SQUEEZING YOUR":? #N 6:? #N6;" HANDS HARD?":GOSUB N2210

720 GOSUB N2320:POSITION N1,N1:? #N6;" FEEL THE":? #N6:? #N6;" TENSION IN YOU R":? #N6:? #N6;" FINGERS WRISTS"

730 ? #N6:? #N6;" AND THE BACKS":? #N6 :? #N6;" OF YOUR HANDS?":GOSUB N2210

740 GOSUB N2320:POSITION N1,N1:? #N6;" FEEL THE":? #N6:? #N6;" TENSION FOR":? #N6:? #N6;" ABOUT 5 SECS?"

750 ? #N6:? #N6;" RELEASE THE":? #N6:? #N6;" TENSION SLOWLY":GOSUB N2210

760 GOSUB N2320:POSITION N1,N1:? #N6;" ENJOY FEELING":? #N6:? #N6;" RELAXED?" :? #N6:? #N6;" AS THE BAR"

770 ? #N6:? #N6;" GETS DARKER":? #N6:? #N6;" LET YOURSELF":GOSUB N2210:GOSUB N2320:POSITION N1,N1:? #N6;"BECOME"

780 ? #N6:? #N6;" MORE AND MORE":? #N6 :? #N6;" RELAXED":GOSUB N2210:GOSUB N 2320:GOSUB N2340:SETCOLOR NO,NO,N6

790 GOSUB 1970:GOSUB N2210:GOSUB N2320 :GOSUB 2290:GOSUB 2280:GOSUB N2340:SET COLOR NO,NO,N6:GOSUB N2320

800 POSITION N1,N1:? #N6;"NOW YOU WILL ":? #N6:? #N6;" LEARN HOW TO":? #N6:? #N6;" RELAX THE"

810 ? #N6:? #N6;" BICEPS":POSITION 15 ,N6:? #N6;"b":GOSUB N2210:GOSUB N2320: POSITION N1,N1:? #N6;"THIS"

820 ? #N6:? #N6;" TONE WILL ":? #N6:? #N6;" SIGNAL YOU TO":? #N6:? #N6;" REL AX THE":? #N6:? #N6;" BICEPS?"

830 GOSUB N2210:GOSUB N2320:GOSUB 2290 :GOSUB 2260:POSITION N1,N1:? #N6;"THIS IS DONE":? #N6:? #N6;" BY SQUEEZING"

840 ? #N6:? #N6;" THE BICEPS":? #N6:? #N6;" THE WAY YOU DO":? #N6:? #N6;" WH EN SOMEONE":GOSUB N2210:GOSUB N2320

850 POSITION N1,N1:? #N6;"SAYS???":? # N6:? #N6;" MAKE A MUSCLE":? #N6:? #N6 ;" DO NOT MAKE"

860 ? #N6:? #N6;" A FIST WITH":? #N6:? #N6;" YOUR HANDS":GOSUB N2210:GOSUB N2320

870 POSITION N1,N1:? #N6;"BE SURE TO": ? #N6:? #N6;" REMEMBER TO":? #N6:? #N6 ;" DO THIS WITH"

880 ? #N6:? #N6;" BOTH ARMS?":GOSUB N2 210:GOSUB N2320:POSITION N1,N1:? #N6;" NOW LET THE"

890 ? #N6:? #N6;" BICEPS RELAX":? #N6 :? #N6;" MOVE THE STICK":? #N6:? #N6;" AND FOCUS ON"

900 ? #N6:? #N6;" THE BAR???":GOSUB N2 210:GOSUB N2320:GOSUB N2340:SETCOLOR N 0,NO,N6:GOSUB 1970

910 GOSUB N2210:GOSUB N2320:GOSUB 2290 :GOSUB 2260:GOSUB N2340:GOSUB N2320:SE TCOLOR NO,NO,N6

920 POSITION N1,N1:? #N6;"NOW YOU WILL ":? #N6:? #N6;" RELAX THE ":? #N6:? #N 6;" TRICEPS AND"

930 ? #N6:? #N6;" TOPS OF THE":? #N6:? #N6;" FOREARMS":POSITION 15,N6:? #N6 ;"t":POSITION 15,N7:? #N6;"f"

940 GOSUB N2210:GOSUB N2320:POSITION N 1,N1:? #N6;"THIS TONE WILL":? #N6:? #N 6;" SIGNAL YOU TO"

950 ? #N6:? #N6;" RELAX THE ":? #N6:? #N6;" TRICEPS AND":? #N6:? #N6;" UPPER FOREARMS?"

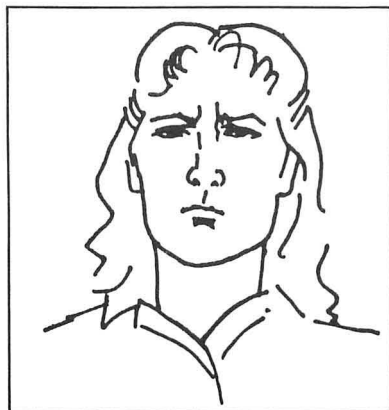
960 GOSUB N2210:GOSUB N2320:GOSUB 2290 :GOSUB 2240:POSITION N1,N1:? #N6;"TO F EEL WHAT IT"

970 ? #N6:? #N6;" IS LIKE TO":? #N6:? #N6;" TENSE THESE":? #N6:? #N6;" MUSCL ES PRESS":? #N6:? #N6;" YOUR ARMS"

980 GOSUB N2210:GOSUB N2320:POSITION N 1,N1:? #N6;"FACE UP INTO":? #N6:? #N6;" THE ARMS OF A"

990 ? #N6:? #N6;" CHAIR? FEEL":? #N6:? #N6;" THE TENSION":? #N6:? #N6;" FOR ABOUT 5 SECS?"

1000 GOSUB N2210:GOSUB N2320:POSITION
15,9: ? #N6; " :POSITION 15,N7: ? #N6;
;" "
1010 POSITION N1,N1: ? #N6; "NOW RELAX??
?: ? #N6: ? #N6;" LET YOURSELF": ? #N6: ?
#N6;" RELAX EVEN"
1020 GOSUB N2210:GOSUB N2320:POSITION
N1,N1: ? #N6; "MORE AS THE BAR": ? #N6: ?
#N6;" GETS DARKER"
1030 ? #N6: ? #N6;" AND DARKER?": ? #N6:
? #N6;" PLEASE MOVE"
1040 ? #N6: ? #N6;" THE STICK?":GOSUB N
2210:GOSUB N2320:GOSUB N2340:GOSUB N23
20:GOSUB 1970
1050 GOSUB N2210:GOSUB N2320:GOSUB 229
0:GOSUB 2240:GOSUB N2340:GOSUB N2320
1060 POSITION N17,3: ? #N6;"#":POSITION
N1,N1: ? #N6;"NOW YOU WILL":POSITION N
16,4: ? #N6;"Z&Z"
1070 POSITION N16,5: ? #N6;"'()#":POSIT
ION N16,N6: ? #N6;"_":POSITION N1,3: ? #
N6;"LEARN HOW TO"
1080 ? #N6: ? #N6;" RELAX THE ": ? #N6: ?
#N6;" FOREHEAD NOSE": ? #N6: ? #N6;" AN
D MOUTH ?":GOSUB N2210
1090 GOSUB N2320:POSITION N1,N1: ? #N6;
"THIS TONE WILL": ? #N6: ? #N6;" SIGNAL
YOU TO": ? #N6: ? #N6;" PREPARE TO"
1100 ? #N6: ? #N6;" RELAX THIS": ? #N6: ?
#N6;" MUSCLE GROUP?":GOSUB N2210:GOSU
B N2320:GOSUB 2150
1110 POSITION 15,3: ? #N6;"f":POSITION
N1,N1: ? #N6;"THIS TONE WILL": ? #N6: ? #
N6;" SIGNAL YOU TO"



1120 ? #N6: ? #N6;" RELAX THE": ? #N6: ?
#N6;" FOREHEAD?":GOSUB N2210:GOSUB N23
20:GOSUB 2150:GOSUB 2160
1130 POSITION N1,N1: ? #N6;"TENSE THE":
? #N6: ? #N6;" FOREHEAD BY": ? #N6: ? #N6
;" FROWNING HARD"
1140 ? #N6: ? #N6;" HOLD THE": ? #N6: ? #
N6;" FROM 5 SECS?":GOSUB N2210:GOSUB
N2320:POSITION N1,N1: ? #N6;"RELAX THE"
1150 ? #N6: ? #N6;" FROWN AND": ? #N6: ?
#N6;" ENJOY THE": ? #N6: ? #N6;" PLEASAN
T"
1160 ? #N6: ? #N6;" SENSATION?":GOSUB N
2210:GOSUB N2320:GOSUB N2340:GOSUB N23
20:GOSUB 1970
1170 GOSUB N2210:GOSUB N2320:GOSUB 215
0:GOSUB 2160:GOSUB N2340:GOSUB N2320
1180 POSITION 15,3: ? #N6;"n":POSITION
N1,N1: ? #N6;"THIS TONE WILL": ? #N6: ? #
N6;" SIGNAL YOU TO"
1190 ? #N6: ? #N6;" PREPARE TO": ? #N6: ?
#N6;" RELAX THE"
1200 ? #N6: ? #N6;" NOSE ? ":GOSUB N2210
:GOSUB N2320:GOSUB 2150:GOSUB 2170:POS
ITION N1,N1: ? #N6;"FIRST TENSE"
1210 ? #N6: ? #N6;" THE MIDDLE OF": ? #N
6: ? #N6;" YOUR FACE BY": ? #N6: ? #N6;"
SCRUNCHING UP"
1220 ? #N6: ? #N6;" THE NASAL AREA":GOS
UB N2210:GOSUB N2320:POSITION N1,N1: ?
#N6;"TRY TO KEEP"
1230 ? #N6: ? #N6;" THE FOREHEAD": ? #N6
: ? #N6;" SMOOTH? TENSE": ? #N6: ? #N6;"
THIS AREA FOR"
1240 ? #N6: ? #N6;" ABOUT 5 SECS???":GOS
UB N2210:GOSUB N2320:POSITION N1,N1: ?
#N6;"NOW BEGIN"
1250 ? #N6: ? #N6;" TO RELAX": ? #N6: ? #
N6;" THIS AREA OF": ? #N6: ? #N6;" YOUR
FACE???"
1260 GOSUB N2210:GOSUB N2320:GOSUB N23
40:GOSUB N2320:GOSUB 1970
1270 GOSUB N2210:GOSUB N2320:GOSUB 215
0:GOSUB 2170:GOSUB N2340:GOSUB N2320
1280 POSITION 15,3: ? #N6;"m":POSITION
N1,N1: ? #N6;"THIS TONE WILL": ? #N6: ? #
N6;" SIGNAL YOU TO"
1290 ? #N6: ? #N6;" PREPARE TO": ? #N6: ?
#N6;" RELAX THE"

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1300 ? #N6:? #N6;" MOUTH AREA?":GOSUB
N2210:GOSUB N2320:GOSUB 2150:GOSUB 219
0:POSITION N1,N1:? #N6;"TENSE THE"
1310 ? #N6:? #N6;" MOUTH BY?":? #N6:? #
N6;" PRESSING THE?":? #N6:? #N6;" LIPS
TOGETHER"
1320 ? #N6:? #N6;" HARD???":GOSUB N221
0:GOSUB N2320:POSITION 14,9:POSITION N
1,N1:? #N6;"HOLD THE "
1330 ? #N6:? #N6;" TENSION FOR":? #N6:
? #N6;" ABOUT 5 SECS?":? #N6:? #N6;" T
HEN LET"
1340 ? #N6:? #N6;" YOURSELF???":GOSUB
N2210:GOSUB N2320:GOSUB N2340:GOSUB N2
320:GOSUB 1970
1350 GOSUB N2210:GOSUB N2320:GOSUB 215
0:GOSUB 2190:GOSUB N2340:GOSUB N2320
1360 POSITION N17,3:? #N6;"#":POSITION
N16,4:? #N6;"%&":POSITION N17,5:? #N
6;"()":POSITION N1,N1
1370 ? #N6;"NOW YOU WILL":? #N6:? #N6;
" LEARN HOW TO":? #N6:? #N6;" RELAX TH
E ":? #N6:? #N6;" NECK SHOULDERS"
1380 ? #N6:? #N6;" AND STOMACH?":GOSUB
N2210:GOSUB N2320:POSITION N1,N1:? #N
6;"THIS TONE WILL"
1390 ? #N6:? #N6;" SIGNAL YOU TO":? #N
6:? #N6;" PREPARE TO":? #N6:? #N6;" RE
LAX THIS"
1400 ? #N6:? #N6;" MUSCLE GROUP?":GOSUB
N2210:GOSUB N2320:GOSUB 1990:POSITIO
N 15,3:? #N6;"n"
1410 POSITION N1,N1:? #N6;"THIS TONE W
ILL":? #N6:? #N6;" SIGNAL YOU TO":? #N
6:? #N6;" PREPARE TO"

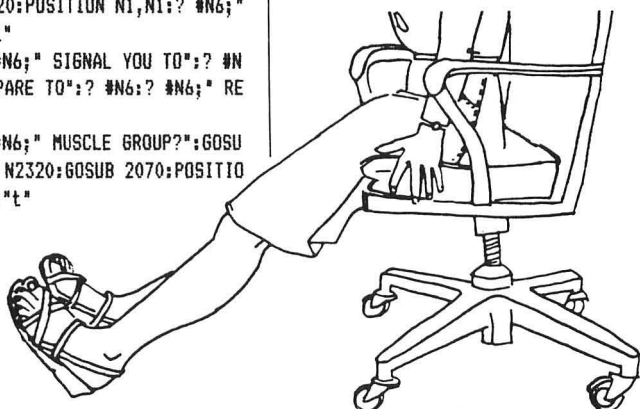


1420 ? #N6:? #N6;" RELAX THE":? #N6:? #
N6;" NECK MUSCLES?":GOSUB N2210:GOSUB
N2320:GOSUB 1990:GOSUB 2010
1430 POSITION N1,N1:? #N6;"TENSE THE":
? #N6:? #N6;" NECK BY?":? #N6:? #N6;" P
LACING A HAND"
1440 ? #N6:? #N6;" AGAINST YOUR":? #N6
:? #N6;" FOREHEAD AND":GOSUB N2210:GOS
UB N2320
1450 POSITION N1,N1:? #N6;"PRESSING YO
UR":? #N6:? #N6;" HEAD INTO YOUR":? #N
6:? #N6;" HAND? DO THIS"
1460 ? #N6:? #N6;" FOR 5 SECS?":? #N6:
? #N6;" THEN ???":GOSUB N2210:GOSUB N2
320:GOSUB N2340:GOSUB N2320:GOSUB 1970
1470 GOSUB N2210:GOSUB N2320:GOSUB 199
0:GOSUB 2010:GOSUB N2340:GOSUB N2320
1480 POSITION 13,5:? #N6;"sh":POSITION
N1,N1:? #N6;"THIS TONE WILL":? #N6:? #
N6;" SIGNAL YOU TO"
1490 ? #N6:? #N6;" PREPARE TO":? #N6:? #
N6;" RELAX THE"
1500 ? #N6:? #N6;" SHOULDERS?":GOSUB N
2210:GOSUB N2320:POSITION 13,5:? #N6;"
":GOSUB 1990:GOSUB 2030
1510 POSITION N1,N1:? #N6;"TENSE THE":
? #N6:? #N6;" SHOULDERS BY?":? #N6:? #N
6;" PUSHING THEM"
1520 ? #N6:? #N6;" INTO YOUR":? #N6:? #
N6;" CHAIR?":GOSUB N2210:GOSUB N2320:
POSITION N1,N1:? #N6;"HOLD THE "
1530 ? #N6:? #N6;" TENSION FOR":? #N6:
? #N6;" ABOUT 5 SECS?":? #N6:? #N6;" T
HEN LET"
1540 ? #N6:? #N6;" YOURSELF???":GOSUB
N2210:GOSUB N2320:GOSUB N2340:GOSUB N2
320
1550 POSITION 13,5:? #N6;"st":POSITION
N1,N1:? #N6;"THIS TONE WILL":? #N6:? #
N6;" SIGNAL YOU TO"
1560 ? #N6:? #N6;" PREPARE TO":? #N6:? #
N6;" RELAX THE"
1570 ? #N6:? #N6;" STOMACH?":GOSUB N22
10:GOSUB N2320:POSITION 15,3:? #N6;"
":GOSUB 1990:GOSUB 2050
1580 POSITION N1,N1:? #N6;"TENSE THE":
? #N6:? #N6;" STOMACH BY?":? #N6:? #N6;
;" SUCKING IN"



1590 ? #N6: ? #N6; " THE STOMACH":? #N6:
? #N6; " HARD?":GOSUB N2210:GOSUB N2320
:POSITION N1,N1: ? #N6;"HOLD THE "
1600 ? #N6: ? #N6; " TENSION FOR":? #N6:
? #N6;" ABOUT 5 SECS?":? #N6: ? #N6;" T
HEN LET"
1610 ? #N6: ? #N6;" YOURSELF???":GOSUB
N2210:GOSUB N2320:GOSUB N2340:GOSUB N2
320:GOSUB 1970:GOSUB N2210
1620 GOSUB N2320:GOSUB 1990:GOSUB 2050
:GOSUB N2340:GOSUB N2320
1630 POSITION N16,4: ? #N6;"%&":POSITI
ON N17,5: ? #N6;"()":POSITION N16,N6: ?
#N6;" +, -"
1640 POSITION N17,N7: ? #N6;". /":POSITI
ON N16,N8: ? #N6;"; <":POSITION N1,N1: ?
#N6;"NOW YOU WILL"
1650 ? #N6: ? #N6;" LEARN HOW TO":? #N6
: ? #N6;" RELAX THE ":? #N6: ? #N6;" THI
GHS CALVES"
1660 ? #N6: ? #N6;" AND FEET?":GOSUB N2
210:GOSUB N2320:POSITION N1,N1: ? #N6;"
THIS TONE WILL"
1670 ? #N6: ? #N6;" SIGNAL YOU TO":? #N
6: ? #N6;" PREPARE TO":? #N6: ? #N6;" RE
LAX THIS"
1680 ? #N6: ? #N6;" MUSCLE GROUP?":GOSU
B N2210:GOSUB N2320:GOSUB 2070:POSITIO
N 15,N7: ? #N6;"t"

1690 POSITION N1,N1: ? #N6;"THIS TONE W
ILL":? #N6: ? #N6;" SIGNAL YOU TO":? #N
6: ? #N6;" PREPARE TO"
1700 ? #N6: ? #N6;" RELAX THE":? #N6: ?
#N6;" THIGH MUSCLES?":GOSUB N2210:GOSU
B N2320:GOSUB 2070:GOSUB 2090
1710 POSITION N1,N1: ? #N6;"TENSE THE":
? #N6: ? #N6;" THIGHS BY":? #N6: ? #N6;"
STRETCHING"
1720 ? #N6: ? #N6;" YOUR LEGS OUT":? #N
6: ? #N6;" IN FRONT OF":GOSUB N2210:GOS
UB N2320
1730 POSITION N1,N1: ? #N6;"YOUR BODY A
S":? #N6: ? #N6;" FAR AS YOU":? #N6: ? #
N6;" CAN??? DO"
1740 ? #N6: ? #N6;" THIS FOR"
1750 ? #N6: ? #N6;" 5 SECS? THEN":GOSUB
N2210:GOSUB N2320:GOSUB N2340:GOSUB N
2320:GOSUB 1970:GOSUB N2210
1760 GOSUB N2320:GOSUB 2070:GOSUB 2090
:GOSUB N2340:GOSUB N2320
1770 POSITION 15,N7: ? #N6;"c":POSITION
N1,N1: ? #N6;"THIS TONE WILL":? #N6: ?
#N6;" SIGNAL YOU TO"
1780 ? #N6: ? #N6;" PREPARE TO":? #N6: ?
#N6;" RELAX THE"
1790 ? #N6: ? #N6;" CALF MUSCLES?":GOSU
B N2210:GOSUB N2320:GOSUB 2070:GOSUB 2
110:POSITION N1,N1: ? #N6;"TENSE THE"
1800 ? #N6: ? #N6;" CALVES BY":? #N6: ?
#N6;" RESTING YOUR":? #N6: ? #N6;" HEEL
S ON THE"
1810 ? #N6: ? #N6;" FLOOR WITH":GOSUB N



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2210:GOSUB N2320:POSITION N1,N1:? #N6;
"YOUR LEGS OUT"
1820 ? #N6:? #N6;" IN FRONT OF"? #N6;
? #N6;" YOU? NOW DRAW"? #N6:? #N6;" Y
OUR FEET"
1830 ? #N6:? #N6;" UP TOWARD":GOSUB N2
210:GOSUB N2320:POSITION N1,N1:? #N6;"
YOUR FACE???":? #N6:? #N6;" FEEL THE"
1840 ? #N6:? #N6;" TENSION AND"? #N6:
? #N6;" THEN LET THESE"
1850 ? #N6:? #N6;" MUSCLES???":GOSUB N
2210:GOSUB N2320:GOSUB N2340:GOSUB N23
20
1860 GOSUB 1970:GOSUB N2210:GOSUB N232
0:GOSUB 2070:GOSUB 2110:GOSUB N2340:GO
SUB N2320
1870 POSITION 15,N7:? #N6;"f":POSITION
N1,N1:? #N6;"THIS TONE WILL":? #N6:?
#N6;" SIGNAL YOU TO"
1880 ? #N6:? #N6;" PREPARE TO":? #N6:?
#N6;" RELAX THE"
1890 ? #N6:? #N6;" FOOT MUSCLES?":GOSUB
N2210:GOSUB N2320:GOSUB 2070:GOSUB 2
130:POSITION N1,N1:? #N6;"TENSE THE"
1900 ? #N6:? #N6;" FEET BY"? #N6:? #N
6;" CURLING YOUR"? #N6:? #N6;" TOES I
NWARD"
1910 ? #N6:? #N6;" AND SQUEEZING":GOSUB
N2210:GOSUB N2320:POSITION N1,N1:? #
N6;"THEM HARD?"
1920 ? #N6:? #N6;" TENSE THE"? #N6:?
#N6;" FEET THIS WAY"? #N6:? #N6;" FOR
ABOUT 5"? #N6:? #N6;" SECS? THEN???"

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1930 GOSUB N2210:GOSUB N2320:GOSUB N23
40:GOSUB N2320:GOSUB 1970:GOSUB N2210:
GOSUB N2320:GOSUB 2070:GOSUB 2130
1940 GOSUB N2340:GOSUB N2320:GOTO 220
1950 POSITION N17,3:? #N6;"#":POSITION
N16,4:? #N6;"%&":POSITION N16,5:? #N
6;"'()*":POSITION N16,N6:? #N6;"_+,-"
1960 POSITION N17,N7:? #N6;"_/:POSITI
ON N16,N8:? #N6;"<":POSITION N1,11:?
#N6;"=====":RETURN
1970 POSITION N1,N1:? #N6;"REPEAT THE"
:? #N6:? #N6;" TENSION"? #N6:? #N6;"
RELAXATION"? #N6:? #N6;" CYCLE? "
1980 ? #N6:? #N6;" TENSE 5 SECS?":RETU
RN
1990 FOR DC=15 TO N1 STEP -N1:SOUND NO
,217,10,DC:SOUND N1,144,10,DC:FOR PSE=
N1 TO 5:NEXT PSE:NEXT DC
2000 SOUND NO,N0,N0,N0:SOUND N1,N0,N0,
N0:RETURN
2010 FOR DC=15 TO N1 STEP -N1:SOUND NO
,108,10,DC:SOUND N1,72,10,DC:FOR PSE=N
1 TO 5:NEXT PSE:NEXT DC
2020 SOUND NO,N0,N0,N0:SOUND N1,N0,N0,
N0:RETURN
2030 FOR D=N1 TO N2:FOR DC=15 TO N1 ST
EP -N1:SOUND NO,108,10,DC:SOUND N1,72,
10,DC:FOR PSE=N1 TO 5:NEXT PSE
2040 NEXT DC:NEXT D:SOUND NO,N0,N0,N0:
SOUND N1,N0,N0,N0:RETURN
2050 FOR D=N1 TO 3:FOR DC=15 TO N1 STE
P -N1:SOUND NO,108,10,DC:SOUND N1,72,1
0,DC:FOR PSE=N1 TO 5:NEXT PSE
2060 NEXT DC:NEXT D:SOUND NO,N0,N0,N0:
SOUND N1,N0,N0,N0:RETURN
2070 FOR DC=15 TO N1 STEP -N1:SOUND NO
,243,10,DC:SOUND N1,193,10,DC:FOR PSE=
N1 TO 5:NEXT PSE:NEXT DC
2080 SOUND NO,N0,N0,N0:SOUND N1,N0,N0,
N0:RETURN
2090 FOR DC=15 TO N1 STEP -N1:SOUND NO
,121,10,DC:SOUND N1,96,10,DC:FOR PSE=N
1 TO 5:NEXT PSE:NEXT DC
2100 SOUND NO,N0,N0,N0:SOUND N1,N0,N0,
N0:RETURN
2110 FOR D=N1 TO N2:FOR DC=15 TO N1 ST
EP -N1:SOUND NO,121,10,DC:SOUND N1,96,
10,DC:FOR PSE=N1 TO 5:NEXT PSE

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2120 NEXT DC:NEXT D:SOUND NO,NO,NO,NO:
SOUND N1,NO,NO,NO:RETURN
2130 FOR D=N1 TO 3:FOR DC=15 TO N1 STE
P -N1:SOUND NO,121,10,DC:SOUND N1,96,1
0,DC:FOR PSE=N1 TO 5:NEXT PSE
2140 NEXT DC:NEXT D:SOUND NO,NO,NO,NO:
SOUND N1,NO,NO,NO:RETURN
2150 FOR DC=15 TO N1 STEP -N1:SOUND NO
,217,10,DC:FOR PSE=N1 TO 5:NEXT PSE:NE
XT DC:SOUND NO,NO,NO,NO:RETURN
2160 FOR DC=15 TO N1 STEP -N1:SOUND NO
,53,10,DC:FOR PSE=N1 TO 5:NEXT PSE:NEX
T DC:SOUND NO,NO,NO,NO:RETURN
2170 FOR D=N1 TO N2:FOR DC=15 TO N1 ST
EP -N1:SOUND NO,53,10,DC:FOR PSE=N1 TO
5:NEXT PSE:NEXT DC
2180 SOUND NO,NO,NO,NO:NEXT D:RETURN
2190 FOR D=N1 TO 3:FOR DC=15 TO N1 STE
P -N1:SOUND NO,53,10,DC:FOR PSE=N1 TO
5:NEXT PSE:NEXT DC
2200 SOUND NO,NO,NO,NO:NEXT D:RETURN
2210 ST=STICK(NO):IF ST=15 THEN GOTO N
2210
2220 IF STICK(NO)<>15 THEN 2220
2230 FOR PSE=N1 TO 25:NEXT PSE:POKE 77
,N0:RETURN
2240 FOR D=N1 TO 3:FOR DC=15 TO N1 STE
P -N1:SOUND NO,29,10,DC:FOR PSE=N1 TO
5:NEXT PSE:NEXT DC
2250 SOUND NO,NO,NO,NO:NEXT D:RETURN
2260 FOR D=N1 TO N2:FOR DC=15 TO N1 ST
EP -N1:SOUND NO,29,10,DC:FOR PSE=N1 TO
5:NEXT PSE:NEXT DC
2270 SOUND NO,NO,NO,NO:NEXT D:RETURN
2280 FOR DC=15 TO N1 STEP -N1:SOUND NO
,29,10,DC:FOR PSE=N1 TO 5:NEXT PSE:NEX
T DC:SOUND NO,NO,NO,NO:RETURN
2290 FOR DC=15 TO N1 STEP -N1:SOUND NO
,121,10,DC:FOR PSE=N1 TO 5:NEXT PSE:NE
XT DC:SOUND NO,NO,NO,NO:RETURN
2300 FOR DC=15 TO N1 STEP -N1:SOUND NO
,50,10,DC:FOR PSE=N1 TO 5:NEXT PSE:NEX
T DC:SOUND NO,NO,NO,NO:RETURN
2310 FOR BL=N1 TO 9:POSITION NO,BL:? #
N6;" " :NEXT BL:RETURN
2320 FOR BL=N1 TO 9:POSITION NO,BL:? #
N6;" " :NEXT BL:RETURN
2330 ? #N6;CHR$(125):RETURN

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2340 POSITION 5,5:? #N6;"RELAX"
2350 N=N6:FOR DELAY=N1 TO 600:SETCOLOR
NO,NO,N:IF DELAY=200 OR DELAY=400 OR
DELAY=550 THEN N=N-2
2360 SETCOLOR NO,NO,N:NEXT DELAY:SETCO
LOR NO,NO,N6:RETURN
2370 GRAPHICS N6:DX=31:DY=35:COLOR N1:
PLOT 26,N1:DRAWTO 31,N1:DRAWTO 31,70:D
RAWTO 26,70:POKE 53277,N2
2380 X=N1:Y=N1:TXT$="E":GOSUB 2470
2390 X=N1:Y=50:TXT$="I":GOSUB 2470
2400 ST=STICK(NO):TR=STRIG(NO)
2410 IF ST=15 AND TR=NO THEN 220
2420 IF ST=13 THEN DX=DX+N1:IF DY<70 T
HEN DY=DY+N1
2430 IF ST=14 THEN DX=DX+N1:IF DY>N1 T
HEN DY=DY-N1
2440 IF ST<13 OR ST=15 THEN 2400
2450 PLOT DX,DY:IF DX<150 THEN FOR PSE
=N2 TO N6:NEXT PSE:GOTO 2400
2460 IF DX>149 THEN R=USR(1664):DX=149
:GOTO 2400
2470 SA=PEEK(89)*256+PEEK(88):MODE=PEE
K(87):IF MODE=N6 THEN COLS=20:ROWS=96
2480 IF Y>ROWS OR X>COLS THEN RETURN
2490 START=SA+Y*COLS+X:GOSUB 2540
2500 CHARSET=(PEEK(756)*256)+(E3*N8)
2510 FOR E2=N7 TO NO STEP -N1:POKE STA
RT+E2*COLS,PEEK(CHARSET+E2):NEXT E2
2520 X=X+N1:IF X>COLS THEN START=START
+COLS*N8:X=NO
2530 START=START+N1:RETURN
2540 E3=ASC(TXT$):IF (E3<32) OR (E3>12
7 AND E3<160) THEN E3=E3+64:RETURN
2550 IF E3>31 AND E3<96 THEN E3=E3-32
2560 RETURN
2570 GRAPHICS NO:SOUND NO,33,N8,N1:POK
E 53277,N2:POKE 53277,4:POKE 710,112
2580 POKE 752,N1:? :FOR TIMES=N1 TO 50
:D=INT(RND(NO)*39+N1):R=INT(RND(NO)*22
+N1):COLOR 46:PLOT D,R:NEXT TIMES
2590 IF STRIG(NO)=NO THEN FOR R=NO TO
3:SOUND R,NO,NO,NO:NEXT R:GOTO 220
2600 R=INT(RND(NO)*5+N1)
2610 IF R=N1 THEN 2660
2620 IF R=N2 THEN 2670
2630 IF R=3 THEN 2680
2640 IF R=4 THEN 2700

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2650 IF R=5 THEN 2720
2660 FOR TIME=4 TO NO STEP -N1:SOUND N
2,49,NO,TIME:FOR PAUSE=1 TO 180:NEXT P
AUSE:NEXT TIME:GOTO 2730
2670 FOR TIME=NO TO 118:SOUND N2,TIME,
N8,N1:FOR PAUSE=1 TO 20:NEXT PAUSE:NEX
T TIME:GOTO 2730
2680 FOR TIME=NO TO 15:SOUND 3,10,NO,T
IME:FOR PAUSE=1 TO 20:NEXT PAUSE:NEXT
TIME:IF STRIG(NO)=NO THEN 2730
2690 FOR TIME=15 TO NO STEP -N1:SOUND
3,10,NO,TIME:FOR PAUSE=0 TO 20:NEXT PA
USE:NEXT TIME:GOTO 2730
2700 FOR TIME=NO TO N7:SOUND 3,TIME,N8
,N1:FOR PAUSE=1 TO 20:NEXT PAUSE:NEXT
TIME:IF STRIG(NO)=NO THEN 2730
2710 FOR TIME=N7 TO NO STEP -N1:SOUND
3,TIME,N8,N1:FOR PAUSE=1 TO 20:NEXT PA
USE:NEXT TIME
2720 IF STRIG(NO) THEN FOR TIME=56 TO
46 STEP -N1:SOUND N2,TIME,N8,N2:FOR PA
USE=1 TO 20:NEXT PAUSE:NEXT TIME
2730 GOTO 2590

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2740 DATA 162,71,24,165,88,105,3,133,2
03,165,89,105,0,133,204,160,15,24,177,
203,42,145,203,136,208,248,24
2750 DATA 165,203,105,20,133,203,144,2
,230,204,202,208,231,104,96
2760 DATA 0,28,62,62,62,62,62,62,12
7,255,255,255,255,255,0,0,1,3,7,15
,31,62,0,0,224,240,248,252,254,191
2770 DATA 124,120,120,60,30,15,7,3,255
,255,255,255,127,127,255,159,135,1
31,128,128,0,0,0
2780 DATA 128,192,224,240,120,88,0,0,1
,0,0,0,0,0,0,255,127,127,119,247,247
,247,247,0,0,0,0,128,128,128,128
2790 DATA 247,247,247,227,227,227,227,
227,128,128,128,128,128,128,128,1,
3,7,7,0,0,0,0,0,128,128,0,0,0,0,0
2800 DATA 192,224,240,112,0,0,0,0,0,0,
255,255,255,255,0,0,195,102,60,24,195,
102,60,24,0,0,0,0,0,0,96,96
2810 DATA 0,0,0,0,255,255,255,255,0,12
6,4,8,16,32,126,0,56,56,56,255,255,126
,60,24

```

SWAT

For ATARI® RELAAAX

TABLE



LINES	SWAT CODE	LENGTH
100 - 150	PV	503
160 - 250	VS	529
260 - 340	JI	502
350 - 420	CK	565
430 - 490	GK	533
500 - 560	AE	543
570 - 630	ZD	515
640 - 700	HX	520
710 - 770	QF	512
780 - 840	WR	548
850 - 920	WQ	542
930 - 990	XP	550
1000 - 1080	AA	582
1090 - 1150	LW	552
1160 - 1230	FP	534
1240 - 1320	FH	573
1330 - 1400	NS	564

LINES	SWAT CODE	LENGTH
1410 - 1470	IH	501
1480 - 1550	GI	581
1560 - 1630	DB	519
1640 - 1700	HR	515
1710 - 1790	XM	541
1800 - 1870	WI	527
1880 - 1950	WD	539
1960 - 2030	SY	517
2040 - 2120	OH	512
2130 - 2210	YY	502
2220 - 2310	EZ	537
2320 - 2430	VC	514
2440 - 2550	CI	469
2560 - 2670	FT	490
2680 - 2750	MA	540
2760 - 2800	MH	502
2810 - 2810	BW	78


```

SS SS SS SS SS SS SS SS SS SS
SS
SS Atari BASIC SS
SS 'Review' SS
SS Authors: Peter Favaro SS
SS Richard M. O'Brien SS
SS Copyright © 1983 SS
SS SoftSide Publications, Inc SS
SS SS
SS SS SS SS SS SS SS SS SS SS

```

If you don't wish to type this program, it is available on Issue #43 SoftSide DV and CV.

```

100 ? CHR$(125):? "INITIALIZING, ONE M
OMENT PLEASE":N0=0:N1=1:N2=2:N6=6:N7=7
:NB=8:DIM S$(1024),TXT$(1)
110 A=ADR(S$):B=INT(A/512+N1)*N2:CBASE
=B*256-A+N1:S$(N1)=CHR$(N0):S$(1024)=C
HR$(N0):S$(N2)=S$(N1):MM=24:NN=31
120 FOR I=N0 TO 511:S$(CBASE+I,CBASE+I
)=CHR$(PEEK(I+57344)):NEXT I
130 RESTORE :FOR I=N0 TO 41:READ R:POK
E 1664+I,R:NEXT I:MM=24:NN=31
140 IF MM>120 THEN 160
150 FOR I=MM TO NN:READ N:S$(I+CBASE,I
+CBASE)=CHR$(N):NEXT I:MM=MM+NB:NN=NN+
NB:GOTO 140

```



```

160 MM=208:NN=215
170 IF MM>256 THEN 190
180 FOR I=MM TO NN:READ N:S$(I+CBASE,I
+CBASE)=CHR$(N):NEXT I:MM=MM+NB:NN=NN+
NB:GOTO 170
190 MM=464:NN=471
200 IF MM>479 THEN 220
210 FOR I=MM TO NN:READ N:S$(I+CBASE,I
+CBASE)=CHR$(N):NEXT I:MM=MM+NB:NN=NN+
NB:GOTO 200
220 REM
230 GRAPHICS 18:POKE 756,B:POKE 77,N0:
SETCOLOR N0,N0,N6:POSITION N1,N0: ? #N6
;"RELAXATION TRAINER"
240 POSITION N1,N1: ? #N6;">>>OPTIONS M
ENU>>>": ? #N6;" 00000000000000000000": ?
#N6;" r REVIEW SEQUENCE"
250 ? #N6;" e ENTIRE PROGRAM": ? #N6;"
d DEEP BREATHING": ? #N6;" TRAINER": ?
#N6;" o OCEAN SOUNDS": ? #N6
260 ? #N6;" 00000000000000000000": ? #N6;
" ENTER CHOICE":CLOSE #N1:OPEN #N1,4
,N0,"K":GET #N1,R
270 IF R=ASC("R") THEN CLOSE #N1:GOSUB
790:GOTO 310
280 IF R=ASC("E") THEN CLOSE #N1:POKE
559,N0:RUN "D:RELAX"
290 IF R=ASC("D") THEN CLOSE #N1:GOTO
1230
300 IF R=ASC("O") THEN CLOSE #N1:GOTO
1430
310 POSITION 2,N1: ? #N6;"REVIEW SEQUE
NCE":GOSUB 1090:GOSUB 1180:POSITION N0
,N0: ? #N6;"FIRST MUSCLE GROUP"
320 ? #N6;"HANDS BICEPS TRICEPS"
330 GOSUB 1090:POSITION N8,4: ? #N6;"%"
:POSITION 10,4: ? #N6;"%":POSITION N8,5
: ? #N6;"%":POSITION 10,5: ? #N6;"%)"
340 POSITION N8,N6: ? #N6;"+" :GOSUB 116
0:GOSUB 1090:GOSUB 1180
350 POSITION N7,N1: ? #N6;"HANDS":POSIT
ION N6,5: ? #N6;"h":GOSUB 1160:GOSUB 11
50
360 GOSUB 1090:GOSUB 1180:GOSUB 830:60
SUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1
180
370 GOSUB 840:GOSUB 1090:GOSUB 1180:60
SUB 1160:GOSUB 1150:GOSUB 830:GOSUB 10
90:GOSUB 1180:GOSUB 1200:GOSUB 1180

```



380 POSITION N7,N1:? #N6;"BICEPS":POSITION N6,5:? #N6;"b":GOSUB 1090:GOSUB 1160:GOSUB 1130

390 GOSUB 1090:GOSUB 1180:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

400 GOSUB 840:GOSUB 1090:GOSUB 1180:GOSUB 1160:GOSUB 1130:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

410 POSITION N6,N1:? #N6;"TRICEPS":POSITION N6,5:? #N6;"t":GOSUB 1090:GOSUB 1160:GOSUB 1110

420 GOSUB 1090:GOSUB 1180:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

430 GOSUB 840:GOSUB 1090:GOSUB 1180:GOSUB 1160:GOSUB 1110:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

440 GOSUB 790:POSITION 4,N0:? #N6;"SECOND GROUP":POSITION N1,N1:? #N6;"FOREHEAD NOSE MOUTH"

450 GOSUB 1090:POSITION 9,3:? #N6;"#":GOSUB 1030:GOSUB 1090:GOSUB 1180

460 POSITION N6,N1:? #N6;"FOREHEAD":POSITION N6,5:? #N6;"f":GOSUB 1030:GOSUB 1040

470 GOSUB 1090:GOSUB 1180:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

480 GOSUB 840:GOSUB 1090:GOSUB 1180:GOSUB 1030:GOSUB 1040:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

490 POSITION N8,N1:? #N6;"NOSE":POSITION N6,5:? #N6;"n":GOSUB 1030:GOSUB 1050

500 GOSUB 1090:GOSUB 1180:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

510 GOSUB 840:GOSUB 1090:GOSUB 1180:GOSUB 1030:GOSUB 1050:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180



520 POSITION N7,N1:? #N6;"MOUTH":POSITION N6,5:? #N6;"m":GOSUB 1030:GOSUB 1070

530 GOSUB 1090:GOSUB 1180:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

540 GOSUB 840:GOSUB 1090:GOSUB 1180:GOSUB 1030:GOSUB 1070:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

550 GOSUB 790:POSITION 5,N0:? #N6;"THIRD GROUP"

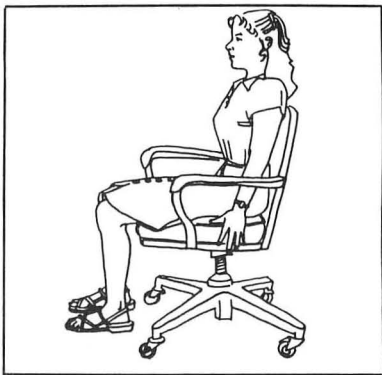
560 POSITION 3,N1:? #N6;"NECK SHOULDER 5":POSITION 5,2:? #N6;"AND STOMACH"

570 GOSUB 1090:POSITION N8,4:? #N6;"%\$&":POSITION 9,5:? #N6;"()":GOSUB 870:GOSUB 1090:GOSUB 1180

580 POSITION N8,N1:? #N6;"NECK":POSITION N6,5:? #N6;"n":GOSUB 870:GOSUB 890:GOSUB 1090:GOSUB 1180:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

600 GOSUB 840:GOSUB 1090:GOSUB 1180:GOSUB 870:GOSUB 890:GOSUB 830:GOSUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1180

610 POSITION N6,N1:? #N6;"SHOULDERS":POSITION N6,5:? #N6;"sh":GOSUB 870:GOSUB 910



```

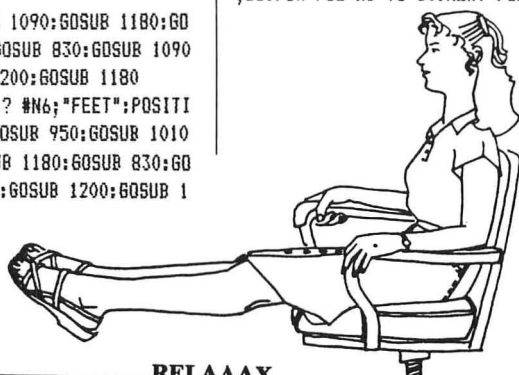
620 GOSUB 1090:GOSUB 1180:GOSUB 830:GO
SUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1
180
630 GOSUB 840:GOSUB 1090:GOSUB 1180:GO
SUB 870:GOSUB 910:GOSUB 830:GOSUB 1090
:GOSUB 1180:GOSUB 1200:GOSUB 1180
640 POSITION N6,N1:? #N6;"STOMACH":POS
ITION N6,5:? #N6;"st":GOSUB 870:GOSUB
930
650 GOSUB 1090:GOSUB 1180:GOSUB 830:GO
SUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1
180
660 GOSUB 840:GOSUB 1090:GOSUB 1180:GO
SUB 870:GOSUB 930:GOSUB 830:GOSUB 1090
:GOSUB 1180:GOSUB 1200:GOSUB 1180
670 GOSUB 790:POSITION 5,N0:? #N6;"LAS
T GROUP":POSITION 4,N1:? #N6;"THIGHS C
ALVES":POSITION N6,2
680 ? #N6;"AND FEET":GOSUB 1090:POSITI
ON N8,N6:? #N6;"+, -:":POSITION 9,N7:? #
N6;"/, /":POSITION N8,N8:? #N6;";, <"
690 GOSUB 950:GOSUB 1090:GOSUB 1180:PO
SITION N7,N1:? #N6;"THIGHS":POSITION N
6,5:? #N6;"t":GOSUB 950:GOSUB 970
700 GOSUB 1090:GOSUB 1180:GOSUB 830:GO
SUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1
180
710 GOSUB 840:GOSUB 1090:GOSUB 1180:GO
SUB 950:GOSUB 970:GOSUB 830:GOSUB 1090
:GOSUB 1180:GOSUB 1200:GOSUB 1180
720 POSITION N7,N1:? #N6;"CALVES":POS
ITION N6,5:? #N6;"c":GOSUB 950:GOSUB 97
0
730 GOSUB 1090:GOSUB 1180:GOSUB 830:GO
SUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1
180
740 GOSUB 840:GOSUB 1090:GOSUB 1180:GO
SUB 950:GOSUB 990:GOSUB 830:GOSUB 1090
:GOSUB 1180:GOSUB 1200:GOSUB 1180
750 POSITION N7,N1:? #N6;"FEET":POSITI
ON N6,5:? #N6;"f":GOSUB 950:GOSUB 1010
760 GOSUB 1090:GOSUB 1180:GOSUB 830:GO
SUB 1090:GOSUB 1180:GOSUB 1200:GOSUB 1
180

```

```

770 GOSUB 840:GOSUB 1090:GOSUB 1180:GO
SUB 950:GOSUB 1010:GOSUB 830:GOSUB 109
0:GOSUB 1180:GOSUB 1200:GOSUB 1180
780 GOTO 220
790 REM
800 GRAPHICS 18:POKE 756,B:SETCOLOR NO
,4,N8:SETCOLOR N1,4,N6:SETCOLOR 2,N0,N
6:POSITION 9,3:? #N6;"#"
810 POSITION N8,4:? #N6;"%&":POSITION
N8,5:? #N6;"{}*":POSITION N8,N6:? #N
6;"+, -:":POSITION 9,N7:? #N6;"/, /"
820 POSITION N8,N8:? #N6;";, <":POSITIO
N N1,11:? #N6;"=====":RET
URN
830 POSITION N7,N1:? #N6;"TENSE":RETUR
N
840 POSITION N7,N1:? #N6;"REPEAT":RETU
RN
850 POSITION N1,N1:? #N6;"REPEAT THE":
? #N6:? #N6;" TENSION":? #N6:? #N6;" R
ELAXATION":? #N6:? #N6;" CYCLE"? "
860 ? #N6:? #N6;" TENSE 5 SECS?":RETUR
N
870 FOR DC=15 TO N1 STEP -N1:SOUND NO,
217,10,DC:SOUND N1,144,10,DC:FOR PSE=N
1 TO 5:NEXT PSE:NEXT DC
880 SOUND NO,N0,N0,N0:SOUND N1,N0,N0,N
0:RETURN
890 FOR DC=15 TO N1 STEP -N1:SOUND NO,
108,10,DC:SOUND N1,72,10,DC:FOR PSE=N1
TO 10:NEXT PSE:NEXT DC
900 SOUND NO,N0,N0,N0:SOUND N1,N0,N0,N
0:RETURN
910 FOR D=N1 TO 2:FOR DC=15 TO N1 STEP
-N1:SOUND NO,108,10,DC:SOUND N1,72,10
,DC:FOR PSE=N1 TO 10:NEXT PSE

```



RELAAAX

RELAAAX

```

920 NEXT DC:NEXT D:SOUND NO,NO,NO,NO:S
OUND N1,NO,NO,NO:RETURN
930 FOR D=N1 TO 3:FOR DC=15 TO N1 STEP
-N1:SOUND NO,108,10,DC:SOUND N1,72,10
,DC:FOR PSE=N1 TO 10:NEXT PSE
940 NEXT DC:NEXT D:SOUND NO,NO,NO,NO:S
OUND N1,NO,NO,NO:RETURN
950 FOR DC=15 TO N1 STEP -N1:SOUND NO,
243,10,DC:SOUND N1,193,10,DC:FOR PSE=N
1 TO 10:NEXT PSE:NEXT DC
960 SOUND NO,NO,NO,NO:SOUND N1,NO,NO,N
O:RETURN
970 FOR DC=15 TO N1 STEP -N1:SOUND NO,
121,10,DC:SOUND N1,96,10,DC:FOR PSE=N1
TO 10:NEXT PSE:NEXT DC
980 SOUND NO,NO,NO,NO:SOUND N1,NO,NO,N
O:RETURN
990 FOR D=N1 TO 2:FOR DC=15 TO N1 STEP
-N1:SOUND NO,121,10,DC:SOUND N1,96,10
,DC:FOR PSE=N1 TO 10:NEXT PSE
1000 NEXT DC:NEXT D:SOUND NO,NO,NO,NO:
SOUND N1,NO,NO,NO:RETURN
1010 FOR D=N1 TO 3:FOR DC=15 TO N1 STE
P -N1:SOUND NO,121,10,DC:SOUND N1,96,1
0,DC:FOR PSE=N1 TO 10:NEXT PSE
1020 NEXT DC:NEXT D:SOUND NO,NO,NO,NO:
SOUND N1,NO,NO,NO:RETURN
1030 FOR DC=15 TO N1 STEP -N1:SOUND NO
,217,10,DC:FOR PSE=N1 TO 10:NEXT PSE:N
EXT DC:SOUND NO,NO,NO,NO:RETURN
1040 FOR DC=15 TO N1 STEP -N1:SOUND NO
,53,10,DC:FOR PSE=N1 TO 10:NEXT PSE:NE
XT DC:SOUND NO,NO,NO,NO:RETURN
1050 FOR D=N1 TO 2:FOR DC=15 TO N1 STE
P -N1:SOUND NO,53,10,DC:FOR PSE=N1 TO
10:NEXT PSE:NEXT DC
1060 SOUND NO,NO,NO,NO:NEXT D:RETURN
1070 FOR D=N1 TO 3:FOR DC=15 TO N1 STE
P -N1:SOUND NO,53,10,DC:FOR PSE=N1 TO
10:NEXT PSE:NEXT DC
1080 SOUND NO,NO,NO,NO:NEXT D:RETURN
1090 ST=STICK(NO):IF ST=15 THEN 1090
1100 FOR PSE=N1 TO 100:NEXT PSE:POKE 7
7,NO:RETURN
1110 FOR D=N1 TO 3:FOR DC=15 TO N1 STE
P -N1:SOUND NO,29,10,DC:FOR PSE=N1 TO
10:NEXT PSE:NEXT DC
1120 SOUND NO,NO,NO,NO:NEXT D:RETURN

```

```

1130 FOR D=N1 TO 2:FOR DC=15 TO N1 STE
P -N1:SOUND NO,29,10,DC:FOR PSE=N1 TO
10:NEXT PSE:NEXT DC
1140 SOUND NO,NO,NO,NO:NEXT D:RETURN
1150 FOR DC=15 TO N1 STEP -N1:SOUND NO
,29,10,DC:FOR PSE=N1 TO 10:NEXT PSE:NE
XT DC:SOUND NO,NO,NO,NO:RETURN
1160 FOR DC=15 TO N1 STEP -N1:SOUND NO
,121,10,DC:FOR PSE=N1 TO 10:NEXT PSE:N
EXT DC:SOUND NO,NO,NO,NO:RETURN
1170 FOR DC=15 TO N1 STEP -N1:SOUND NO
,50,10,DC:FOR PSE=N1 TO 10:NEXT PSE:NE
XT DC:SOUND NO,NO,NO,NO:RETURN
1180 FOR BL=NO TO 2:POSITION NO,BL:? #
N6;" " :NEXT BL:RE
TURN
1190 ? #N6:CHR$(125):RETURN
1200 POSITION N7,N1:? #N6;"RELAX"
1210 N=N6:FOR DELAY=N1 TO 900:SETCOLOR
2,NO,N:IF DELAY=300 OR DELAY=600 OR D
ELAY=750 THEN N=N-2
1220 SETCOLOR 2,NO,N:NEXT DELAY:SETCOL
OR 2,NO,N6:RETURN
1230 GRAPHICS N6:DX=31:DY=35:COLOR N1:
PLOT 26,N1:DRAWTO 31,N1:DRAWTO 31,70:D
RAWTO 26,70:POKE 53277,N2
1240 X=N1:Y=N1:TXT$="E":GOSUB 1330
1250 X=N1:Y=50:TXT$="I":GOSUB 1330
1260 ST=STICK(NO):TR=STRIG(NO)
1270 IF ST=15 AND TR=NO THEN 220
1280 IF ST=13 THEN DX=DX+N1:IF DY<70 T
HEN DY=DY+N1
1290 IF ST=14 THEN DX=DX+N1:IF DY>N1 T
HEN DY=DY-N1
1300 IF ST<13 OR ST=15 THEN 1260
1310 PLOT DX,DY:IF DX<150 THEN FOR PSE
=N2 TO N6:NEXT PSE:GOTO 1260
1320 IF DX>149 THEN R=USR(1664):DX=149
:GOTO 1260
1330 SA=PEEK(89)*256+PEEK(88):MODE=PEE
K(87):IF MODE=N6 THEN COLS=20:ROWS=96
1340 IF Y>ROWS OR X>COLS THEN RETURN
1350 START=SA+Y*COLS+X:GOSUB 1400
1360 CHARSET=(PEEK(756)*256)+(E3*N8)
1370 FOR E2=N7 TO NO STEP -N1:POKE STA
RT+E2*COLS,PEEK(CHARSET+E2):NEXT E2
1380 X=X+N1:IF X>COLS THEN START=START
+COLS*N8:X=NO
1390 START=START+N1:RETURN

```

```

1400 E3=ASC(TXT#):IF (E3<32) OR (E3>12
7 AND E3<160) THEN E3=E3+64:RETURN
1410 IF E3>31 AND E3<96 THEN E3=E3-32
1420 RETURN
1430 GRAPHICS NO:SOUND NO,33,NB,N1:POK
E 53277,N2:POKE 53277,4:POKE 710,112
1440 POKE 752,N1:? :FOR TIMES=N1 TO 50
:D=INT(RND(NO)*39+N1):R=INT(RND(NO)*22
+N1):COLOR 46:PLOT D,R:NEXT TIMES
1450 IF STRIG(NO)=NO THEN FOR R=NO TO
3:SOUND R,NO,NO,NO:NEXT R:GOTO 220
1460 R=INT(RND(NO)*5+N1)
1470 IF R=N1 THEN 1520
1480 IF R=N2 THEN 1530
1490 IF R=3 THEN 1540
1500 IF R=4 THEN 1560
1510 IF R=5 THEN 1580
1520 FOR TIME=4 TO NO STEP -N1:SOUND N
2,49,NO,TIME:FOR PAUSE=1 TO 180:NEXT P
AUSE:NEXT TIME:GOTO 1590
1530 FOR TIME=NO TO 118:SOUND N2,TIME,
NB,N1:FOR PAUSE=1 TO 20:NEXT PAUSE:NEX
T TIME:GOTO 1590
1540 FOR TIME=NO TO 15:SOUND 3,10,NO,T
IME:FOR PAUSE=1 TO 20:NEXT PAUSE:NEXT
TIME:IF STRIG(NO)=NO THEN 1590
1550 FOR TIME=15 TO NO STEP -N1:SOUND
3,10,NO,TIME:FOR PAUSE=0 TO 20:NEXT PA
USE:NEXT TIME:GOTO 1590
1560 FOR TIME=NO TO N7:SOUND 3,TIME,NB
,N1:FOR PAUSE=1 TO 20:NEXT PAUSE:NEXT
TIME:IF STRIG(NO)=NO THEN 1590

```

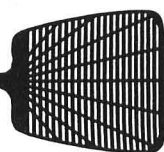
```

1570 FOR TIME=N7 TO NO STEP -N1:SOUND
3,TIME,NB,N1:FOR PAUSE=1 TO 20:NEXT PA
USE:NEXT TIME
1580 IF STRIG(NO) THEN FOR TIME=56 TO
46 STEP -N1:SOUND N2,TIME,NB,N2:FOR PA
USE=1 TO 20:NEXT PAUSE:NEXT TIME
1590 GOTO 1450
1600 DATA 162,71,24,165,88,105,3,133,2
03,165,89,105,0,133,204,160,15,24,177,
203,42,145,203,136,208,248,24
1610 DATA 165,203,105,20,133,203,144,2
,230,204,202,208,231,104,96
1620 DATA 0,28,62,62,62,62,28,62,12
7,255,255,255,255,255,255,0,0,1,3,7,15
,31,62,0,0,224,240,248,252,254,191
1630 DATA 124,120,120,60,30,15,7,3,255
,255,255,255,127,127,255,159,135,1
31,128,128,0,0,0
1640 DATA 128,192,224,240,120,88,0,0,1
,0,0,0,0,0,0,255,127,127,119,247,247
,247,247,0,0,0,128,128,128,128
1650 DATA 247,247,247,227,227,227,227,
227,128,128,128,128,128,128,128,1,
3,7,7,0,0,0,0,128,128,0,0,0,0,0
1660 DATA 192,224,240,112,0,0,0,0,0,0,
255,255,255,255,0,0,195,102,60,24,195,
102,60,24,0,0,0,0,0,96,96
1670 DATA 0,0,0,0,255,255,255,255,0,12
6,4,8,16,32,126,0,56,56,56,255,255,126
,60,24

```

For ATARI® REVIEW

TABLE



LINES	SWAT CODE	LENGTH
100 - 170	QX	517
180 - 260	CE	530
270 - 360	CL	556
370 - 420	XT	501
430 - 490	IR	555
500 - 560	YF	533
570 - 630	BK	576
640 - 690	VW	509
700 - 760	PC	551
770 - 850	DS	510

LINES	SWAT CODE	LENGTH
860 - 940	LA	517
950 - 1030	HL	561
1040 - 1130	HY	517
1140 - 1230	EW	583
1240 - 1350	JL	451
1360 - 1470	FD	483
1480 - 1570	QY	519
1580 - 1640	IK	544
1650 - 1670	EM	282

RELAAAX

DV BONUS

Chemistry Assistant



by Art V. Cestaro III

Chemistry Assistant is an educational aid for an Atari® with 24K RAM.

Chemistry Assistant is for everyone in a chemistry course who hates to look up the more commonly used formulas. For example, do you remember the formula to change grams to moles, or the one to find density? This program does it for you, along with other common chemical problems, such as finding molecular weight, converting temperatures, and metric conversions.

The main menu lists all the functions the program can perform. To choose one, type the number of the function you desire, and press the Return key. If you see the message "Try again," you entered an incorrect numeral. The screen indicates your choice, and asks you to confirm it (answer YES or NO). The program goes to the appropriate function, and prompts you for the information it needs. You may return to the menu by typing "M" when the computer asks if you want to continue or go back to the menu.

Functions

● 1. View Element

This shows you how a particular element appears in the periodic table. Enter the symbol for the element you wish to view. For example, enter "AU" for gold.

● 2. Grams to Moles

To compute the number of moles from the number of grams, enter the element and the number of grams. Here is the formula:

$$\frac{\text{\#grams} \times 1 \text{ mole}}{\text{atomic weight}}$$

● 3. Moles to Grams

To find the number of grams from the number of moles, enter the element and the number of moles. The formula is:

$$\frac{\text{\#moles} \times \text{atomic weight}}{1 \text{ mole}}$$

● 4. Molecular Weight

Tell the program the number of *different* elements in your molecule, the name of each element, and the number of atoms of each. For example, take the molecule $C_2H_6O_2$. First enter 3, the number of different elements in the molecule (C, H, and O). Then, enter the first element, "C," and the number of C atoms, 2. Repeat this for the other atoms in the molecule.

● 5. Density

This function calculates the density of an object. Enter its mass and volume. The formula is:

$$\frac{\text{mass}}{\text{volume}}$$

● 6. Degrees (Temperature)

Enter the conversion you want by pressing "F" for Fahrenheit to Celsius, or "C" for Celsius to Fahrenheit. The formulas are:

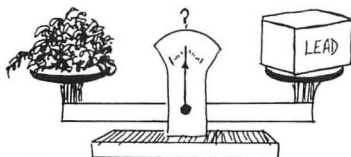
$$C^{\circ} = \frac{(F^{\circ} - 32) \times 5}{9}$$

$$F^{\circ} = \frac{(9 \times C^{\circ}) + 160}{5}$$

● 7. Molarity

To find a solution's molar concentration, enter the number of moles of solute, then enter the number of liters of solution. The molarity formula is:

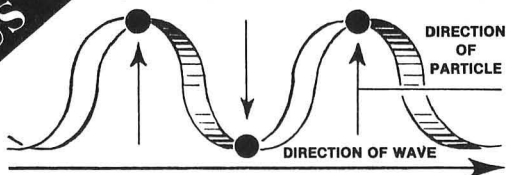
$$\frac{\text{number of moles of solute}}{\text{number of liters of solution}}$$



Which weighs the most — a pound of lead or a pound of feathers?

CHEMISTRY ASSISTANT

DV BONUS



Transverse wave.

● 8. Molality

To find the molal concentration of a solution, enter the number of moles of solute, and the number of kilograms of solvent. Here's the formula:

$$\frac{\text{moles of solute}}{\text{kg of solvent}}$$

● 9. Metric Conversion

Several calculations are included under this heading. Choose the function you want by typing the corresponding numeral, then enter the information the computer requests.

● 10. Percent Difference

This function calculates the percent difference between two numbers. Enter the experimental value and the accepted value. The formula:

$$\frac{|\text{experimental value} - \text{accepted value}|}{\text{accepted value}} \times 100\%$$

● 11. Wavelength of Light

To calculate the wavelength of light, enter its frequency. The formula for wavelength:

$$\text{wavelength} = \frac{\text{speed of light}}{\text{frequency}}$$

● 12. Relative Error

To find the relative error of a measurement, enter the absolute error, then enter the measurement. The formula is:

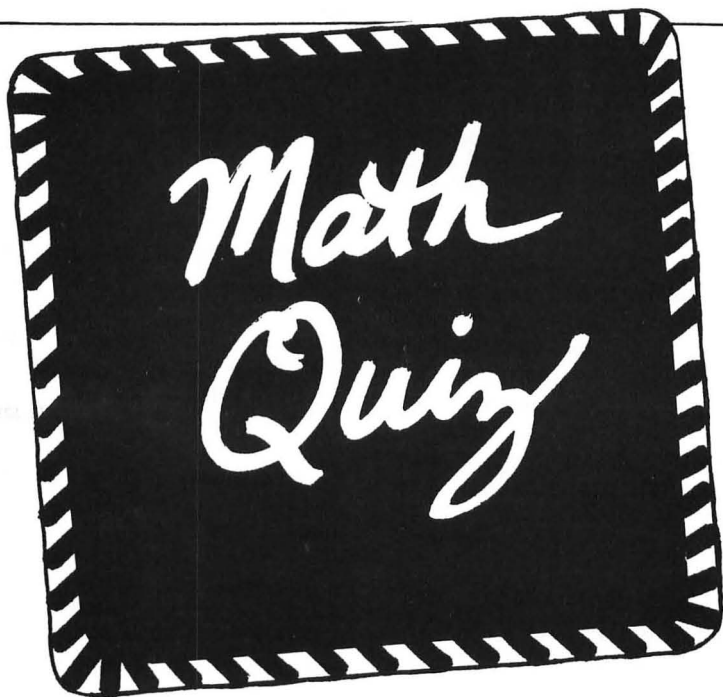
$$\frac{\text{absolute error}}{\text{measurement}}$$

● 13. Exit program

Good bye!

Note: Readers wishing to contact the author may write to him at the following address:

**Art V. Cestaro III
PO Box 367
N. Eastham, MA 02561**



by Jerry P. Waid

Math Quiz is an educational program for an Atari® with at least 16K RAM.

The fun begins as the program title appears on the screen in a rainbow of color. Your child begins playing by choosing the number of problems to solve. Too few or too many problems result in a witty response from the computer. Next, the child selects the type (any of the four arithmetic functions), and level of difficulty. For multiplication, he may choose between random problems or practice on the multiplication tables.

The problems appear on the screen in graphics mode two to provide a large color display. At the bottom of the screen is an area for entering responses. The computer displays both the problem and the student's answer. Several different responses inform your youngster whether the answer is correct. The approach is friendly and encouraging, rather than punitive. An incorrect response results in another chance to try the problem.

Although the program imposes no time limit that might discourage a child, it does record correct first responses. After completing the selected number of problems, the child receives a rank, such as "You need more practice" or "Genius," while the computer plays a well-known tune.

At the end of each drill, your child may choose to repeat the drill at the same level, or may make changes in the level and type of problem.

MATH QUIZ

```

SS SS SS SS SS SS SS SS SS SS SS
SS                                     SS
SS      Atari BASIC                 SS
SS      'Math Quiz'                 SS
SS      Author: Jerry P. Waid       SS
SS      Copyright © 1983            SS
SS      SoftSide Publications, Inc  SS
SS                                     SS
SS SS SS SS SS SS SS SS SS SS SS

```

If you don't wish to type this program, it is available on issue #43 SoftSide DV and CV.

Initialization.

```

10 GRAPHICS 7+16:POKE 16,64:POKE 53774,64
20 DIM R1$(35),R2$(10),R3$(10),R4$(10),R5$(25),U$(1),Z$(3),I$(1)
40 DIM D$(3),CUP$(32),CDOWN$(32),CL$(38)
50 CL$=""

```

```
55 N752=752:N0=0:N1=1
```

Call the machine language subroutine for the title page.

```
60 GOSUB 1800
```

Main program loop.

```

70 GRAPHICS 0:POKE 16,64:POKE 53774,64
80 Q=0:C=0
90 POKE 16,64:POKE 53774,64:PRINT "}"
Print graphics mode 1 on a graphics mode 0 screen.
100 DL=PEEK(560)+PEEK(561)*256:POKE (DL+6),6:POKE (DL+7),6
110 PRINT "LET'S TEST YOUR MATH SKILL."

```

Select how many problems to do.

```

120 PRINT :PRINT
130 TRAP 90
140 PRINT "HOW MANY PROBLEMS "
150 PRINT " DO YOU WANT TO SOLVE "
160 IF J<10 THEN 180
170 GOTO 200
180 GRAPHICS 1+16:POKE 16,64:POKE 53774,64:PRINT #6:PRINT #6:PRINT #6:PRINT #6;" YOU MUST BE "
190 PRINT #6;" IN A HURRY !!!":PRINT #6:PRINT #6;" TRY AT LEAST 10 ":FOR H=1 TO 1200:NEXT H:GRAPHICS 0:GOTO 90
200 IF J>30 THEN 220

```

```

210 GOTO 240
220 GRAPHICS 1+16:POKE 16,64:POKE 53774,64:PRINT #6:PRINT #6:PRINT #6:PRINT #6;" I HAVE ALL DAY,"
230 PRINT #6;" BUT HOW ABOUT YOU ?":PRINT #6:PRINT #6;" KEEP IT TO 30":FOR H=1 TO 1200:NEXT H:GRAPHICS 0:GOTO 90
240 POSITION 2,8:PRINT CL$:POSITION 2,8

```

Select the type of math problem to do.

```

250 PRINT "INPUT -- A=ADD S=SUB M=MULT D=DIV";INPUT U$
260 IF U$<>"A" THEN IF U$<>"S" THEN IF U$<>"M" THEN IF U$<>"D" THEN 240
270 IF U$<>"M" THEN 330
275 POSITION 2,12:PRINT CL$
280 POSITION 2,10:PRINT "INPUT 'T' FOR MULTIPLICATION TABLES":PRINT
290 PRINT "INPUT 'R' FOR RANDOM NUMBER S";INPUT I$:IF I$<>"T" THEN IF I$<>"R" THEN 270
300 IF I$<>"T" THEN 330
310 POSITION 2,16:PRINT CL$:POSITION 2,14:PRINT "INPUT MULTIPLICATION TABLE NUMBER"
315 TRAP 310
320 PRINT :PRINT "EXAMPLE '2' GIVES 2X _=";INPUT A:PRINT :PRINT
330 REM INCORRECT INPUT (DO NOT DELETE )

```

Input skill level.

```

340 TRAP 330
350 POSITION 2,18:PRINT CL$:POSITION 2,18:PRINT "INPUT YOUR SKILL LEVEL 1,2,3";INPUT S
360 IF S=1 THEN T=10
370 IF S=2 THEN T=20
380 IF S=3 THEN T=80
390 IF S<1 OR S>3 THEN 350

```

Initialize the question counter and the correct response counter.

```

400 Q=0:C=0
410 PRINT "}"
420 Q=Q+1

```

Do not generate the variable A for multiplication tables.

```
430 IF I$="T" THEN 450
```

Generate the variables A and B for math equations.

```
440 LET A=(INT(T#RND(1)))+1:IF S>1 THE
N A=A+10
```

```
450 LET B=(INT(T#RND(1)))+1:IF S>1 THE
N B=B+10
```

Branch to the appropriate subroutine for the type of problem.

```
460 IF U$="A" THEN GOSUB 1000
```

```
470 IF U$="S" THEN GOSUB 1200
```

```
480 IF U$="M" THEN GOSUB 1400
```

```
490 IF U$="D" THEN GOSUB 1600
```

Score incorrect responses.

```
500 C=C-2
```

Respond to incorrect answers.

```
510 PRINT CHR$(253)
```

```
520 LET R=INT(3#RND(1))+1
```

```
530 SETCOLOR 2,3,2
```

```
540 ON R GOTO 550,570
```

```
550 PRINT " HMMM...I GET A DIFFERENT
ANSWER!":? :FOR H=1 TO 800:NEXT H:IF
U$="D" THEN 1620
```

```
560 GOTO 460
```

```
570 PRINT " TRY A DIFFERENT ANSWER. G
OOD LUCK!":? :FOR H=1 TO 800:NEXT H:IF
U$="D" THEN 1620
```

```
580 GOTO 460
```

Respond to correct answers.

```
590 LET R=INT(3#RND(1))+1
```

```
600 SETCOLOR 2,12,2:PRINT
```

```
610 ON R GOTO 620,630,640
```

```
620 PRINT " RIGHT ON...GOOD WORK!!!
":? :FOR H=1 TO 400:NEXT H:GOTO 650
```

```
630 PRINT " YOU GOT IT! TRY ANOTHER
":? :FOR H=1 TO 400:NEXT H:GOTO 650
```

```
640 PRINT " THAT'S GREAT! KEEP IT U
P!":? :FOR H=1 TO 400:NEXT H:GOTO 650
```

```
650 C=C+1
```

Score correct answers, and determine if all the problems requested have been worked.

```
660 IF B<J THEN 420
```

Provide rank based on correct answers.

```
670 GRAPHICS 2+16:POKE 16,64:POKE 5377
4,64
```

```
680 RESTORE :PRINT #6
```

```
690 PRINT #6:PRINT #6
```

```
700 R1$=" YOU NEED MORE PRACTICE!"
```

```
710 R2$="NOVICE"
```

```
720 R3$="EXPERT"
```

```
730 R4$="GENIUS"
```

```
740 R5$="YOUR RANK IS.."
```

```
750 IF C<(J-5) THEN PRINT #6;R5$;R1$
```

```
760 IF C=(J-4) THEN PRINT #6;R5$;R2$
```

```
770 IF C=(J-3) THEN PRINT #6;R5$;R2$
```

```
780 IF C=(J-2) THEN PRINT #6;R5$;R3$
```

```
790 IF C=(J-1) THEN PRINT #6;R5$;R3$
```

```
800 IF C=J THEN PRINT #6;R5$;R4$
```

```
810 FOR I=1 TO 700:NEXT I
```

Option selection for the next pass through the program.

```
820 GRAPHICS 1:POKE 16,64:POKE 53774,6
4
```

```
830 PRINT #6;"WELL IT'S TIME":PRINT #6
;" TO DECIDE .":PRINT #6
```

```
840 PRINT #6;"IF YOU WANT TO GO"
```

```
850 PRINT #6;"AGAIN AT THE SAME":PRINT
#6;"SKILL LEVEL OR MODE"
```

```
860 PRINT #6:PRINT #6;"TYPE..'A'"
```

```
870 PRINT #6:PRINT #6;"IF YOU WANT TO"
:PRINT #6;"CHANGE MODE OR "
```

```
890 PRINT #6;"SKILL LEVEL":PRINT #6:PR
INT #6;"TYPE..'C'"
```

```
900 PRINT :POKE N752,N0:PRINT " WHAT
IS YOUR DESIRE ";:INPUT Z$:POKE N752,N
1
```

```
910 IF Z$<>"A" THEN IF Z$<>"C" THEN 82
0
```

```
920 RESTORE
```

```
930 GRAPHICS 0:POKE 16,64:POKE 53774,6
4:IF Z$="A" THEN 400
```

```
940 I$="R":GOTO 80
```

```
950 POKE 16,192:POKE 53774,192
```

Addition subroutine.

```
960 END
```

```
999 REM ADDITION
```

```
1000 PRINT "3"
```

```
1010 TRAP 1000
```

Display problem.

```
1020 GRAPHICS 2:POKE 16,64:POKE 53774,
64
```

```
1030 PRINT #6:PRINT #6
```

```
1040 PRINT #6;" "
```

```
1050 PRINT #6;" ";Q;
```

```
1060 IF A<10 THEN PRINT #6;" ";
```

```
1070 PRINT #6;" ";A
```

```
1080 PRINT #6;" ";
```

```
1090 IF B<10 THEN PRINT #6;" ";
```

MATH QUIZ

MATH QUIZ

```

1100 PRINT #6;"+";B
1110 PRINT #6;"-----"
1120 POSITION 11,7:PRINT #6;"?"
Get answer.
1130 PRINT :POKE N752,N0:PRINT "    WH
AT IS YOUR ANSWER ";:INPUT D:POKE N752
,N1
1140 POSITION 10,7:IF D<10 THEN PRINT
#6;" ";
1145 IF D>99 THEN PRINT #6;D:GOTO 1160
1150 PRINT #6;" ";D
1160 PRINT :IF D=A+B THEN 590
1170 RETURN
Subtraction subroutine.
1199 REM SUBTRACTION
1200 PRINT " "
1210 TRAP 1200
Ensure that A is greater than B.
1220 IF A>B THEN 1250
1240 A=A+B
Display problem.
1250 GRAPHICS 2:POKE 16,64:POKE 53774,
64
1260 PRINT #6:PRINT #6:PRINT #6;" #"
1270 PRINT #6;" ";Q,
1280 IF A<10 THEN PRINT #6;" ";
1285 IF A>99 THEN PRINT #6;A:GOTO 1300
1290 PRINT #6;" ";A
1300 PRINT #6;" ",
1310 IF B<10 THEN PRINT #6;" ";
1320 PRINT #6;"-";B
1330 PRINT #6;"-----"
1340 POSITION 11,7:PRINT #6;"?"
Get answer.
1350 PRINT :POKE N752,N0:PRINT "    WH
AT IS YOUR ANSWER ";:INPUT D:POKE N752
,N1
1360 POSITION 11,7:IF D<10 THEN PRINT
#6;" ";
1370 PRINT #6;D
1380 PRINT :IF D=A-B THEN 590
1390 RETURN
Multiplication subroutine.
1399 REM MULTIPLICATION
1400 PRINT " "
1410 TRAP 1400
Display problem.
1420 GRAPHICS 2:POKE 16,64:POKE 53774,
64
1430 PRINT #6:PRINT #6:PRINT #6;" #"

```

```

1440 PRINT #6;" ";Q,
1450 IF B<10 THEN PRINT #6;" ";
1460 PRINT #6;" ";B
1470 PRINT #6;" ",
1480 IF A<10 THEN PRINT #6;" ";
1490 PRINT #6;"X";A
1500 PRINT #6;"-----"
1510 POSITION 12,7:PRINT #6;"?"
Get answer.
1520 PRINT :POKE N752,N0:PRINT "    WH
AT IS YOUR ANSWER ";:INPUT D:POKE N752
,N1
1530 POSITION 11,7:IF D<10 THEN PRINT
#6;" ";
1540 IF D>99 THEN PRINT #6;D:GOTO 1560
1550 PRINT #6;" ";D
1560 PRINT :IF D=A*B THEN 590
1570 RETURN
Division subroutine.
Ensure that A is divisible by B.
1599 REM DIVISION
1600 A=B*(INT(10*RNDRND(1))+1)
1610 PRINT " "
Display problem.
1620 TRAP 1610
1630 GRAPHICS 2:POKE 16,64:POKE 53774,
64
1640 PRINT #6:PRINT #6:PRINT #6;" #"
1650 PRINT #6;" ";Q;" ";A;" / ";B;"
="
1660 POSITION 16,3:PRINT #6;"?"
Get answer.
1670 PRINT :POKE N752,N0:PRINT "    WH
AT IS YOUR ANSWER ";:INPUT D:POKE N752
,N1
1680 POSITION 16,3:PRINT #6;D
1690 PRINT :IF D=A/B THEN 590
1700 RETURN
Set up program title.
1799 REM PRINT MATH QUIZ
1800 NS=4:NT=15
Machine language subroutine for
rainbow effect.
1810 GOSUB 4000
Print "Math Quiz" in graphics Mode
7.
1820 GOSUB 2000
Create the rainbow effect.
1830 FOR I=1 TO 100:NEXT I
1840 SETCOLOR 0,12,6

```



```

1850 RESTORE
1860 CUP$(15,15)=CHR$(22)
1870 X=USR(ADR(CUP$),NS)
1880 CUP$(15,15)=CHR$(26)
1890 X=USR(ADR(CUP$),NS)
1900 SETCOLOR 0,3,4
1910 CDOWN$(15,15)=CHR$(26)
1920 X=USR(ADR(CDOWN$),NS)
1930 SETCOLOR 0,7,2
1950 RETURN
Plot "Math Quiz."
1999 REM PRINT MATH QUIZ
2000 GRAPHICS 7:POKE 16,64:POKE 53774,
64
2020 SETCOLOR 0,0,0:SETCOLOR 1,0,14:SE
TCOLOR 2,0,0:SETCOLOR 4,0,0
2030 COLOR 2:FCOLOR=1
2040 RESTORE 2010
Display author's name on the title
page.
2060 DL=PEEK(560)+PEEK(561)*256
2070 POKE (DL+85),70:POKE (DL+88),7:PO
KE (DL+89),7:POKE (DL+90),7
2090 PRINT " BY J
.P. WAID"
Plot "Math Quiz."
2100 READ D$:IF ASC(D$)<64 THEN GOTO 2
180
2110 IF D$="P" THEN READ ROW,COLUMN:GO
SUB 2190:PLOT COLUMN,ROW:GOTO 2100
2120 IF D$="O" THEN READ RORIGIN,CORIG
IN:GOTO 2100
2130 IF D$="END" THEN RETURN
2140 IF D$(">")"F" THEN GOTO 2100
2150 READ ROW,COLUMN:GOSUB 2190:POSITI
ON COLUMN,ROW:POKE 765,FCOLOR
2160 XIO 18,#6,0,0,"S":PLOT COLUMN,RO
W:GOTO 2100
2180 ROW=VAL(D$):READ COLUMN:GOSUB 219
0:DRAWTO COLUMN,ROW:GOTO 2100
2190 ROW=ROW+RORIGIN:COLUMN=COLUMN+COR
IGIN:RETURN
2999 REM PRINT MATH QUIZ
3000 REM "H"
3010 DATA 0,1,20
3020 DATA P,32,24,0,24,0,20,F,12,12,0,
4,0,0,P,32,24,32,17,F,16,17,23,12,F,16
,7,32,7,32,0,F,0,0
3040 REM "A"

```

```

3050 DATA 0,1,50
3060 DATA P,32,24,0,14,P,14,13,F,10,12
,14,11,F,14,13,P,32,24,32,17,F,20,13,2
0,11,32,7,32,0,F,0,10,0,14
3100 REM "T"
3110 DATA 0,1,80
3120 DATA P,0,0,0,24,7,24,7,16,32,16,3
2,8,F,7,8,7,0,F,0,0
3140 REM "H"
3150 DATA 0,1,110
3160 DATA P,32,24,0,24,0,17,F,14,17,14
,7,0,7,P,32,24,32,17,F,20,17,20,7,32,7
,32,0,F,0,0,0,7
3200 REM "Q"
3210 DATA 0,40,20
3220 DATA P,34,21,32,20,28,24,4,24,0,2
0,0,4,P,23,9,23,14,25,15,25,17,P,23,9,
F,25,10,25,7,7,7,F,7,17,F,25,17
3230 DATA P,34,21,34,16,F,32,15,32,4,F
,28,0,F,4,0,F,0,4
3240 REM "U"
3250 DATA 0,40,50
3260 DATA P,0,24,28,24,32,20,32,4,P,0,
24,0,17,F,25,17,25,7,0,7,0,0,F,28,0,F,
32,4
3300 REM "I"
3310 DATA 0,40,80
3320 DATA P,32,0,32,24,25,24,25,16,7,1
6,7,24,0,24,0,0,F,7,0,7,8,F,25,8,25,0,
F,32,0
3340 REM "Z"
3350 DATA 0,40,110
3360 DATA P,32,0,32,24,23,24,23,17,F,2
5,17,25,10,7,24,0,24,0,0,P,32,0,F,25,0
,F,7,14,7,7,9,7,9,0,F,0,0
3500 DATA END
Read data for the rainbow effect.
3999 REM MACHINE SUB DATA
4000 RESTORE 4100
4005 FOR I=1 TO 32
4010 READ C:CUP$(I)=CHR$(C)
4020 NEXT I
4030 CDOWN$=CUP$:CDOWN$(12,12)=CHR$(22
9)
4040 RETURN
4100 DATA 104
4110 DATA 104
4120 DATA 104
4130 DATA 72

```

MATH QUIZ

4140 DATA 162,57
 4150 DATA 160,0
 4160 DATA 173,0,210
 4170 DATA 101,20
 4180 DATA 141,22,208
 4190 DATA 141,10,212
 4200 DATA 136
 4210 DATA 208,242

4220 DATA 202
 4230 DATA 208,237
 4240 DATA 104
 4250 DATA 56
 4260 DATA 233,1
 4270 DATA 208,228
 4280 DATA 96

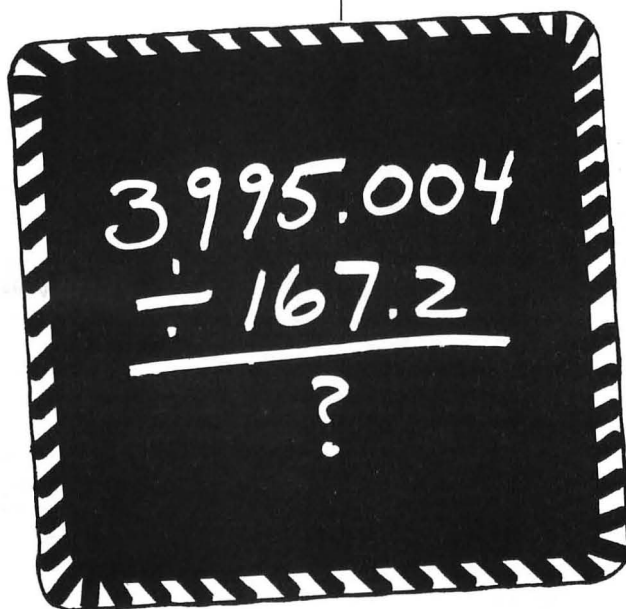
SWAT



For ATARI® MATH QUIZ TABLE

LINES	SWAT CODE	LENGTH
10 - 100	YD	501
110 - 220	MM	565
230 - 310	AV	527
315 - 420	MP	355
430 - 540	HJ	343
550 - 640	YB	519
650 - 760	ON	309
770 - 890	KP	548
900 - 1030	FO	324
1040 - 1145	PQ	365
1150 - 1280	SR	261

LINES	SWAT CODE	LENGTH
1285 - 1390	XQ	334
1399 - 1500	DK	305
1510 - 1630	OA	350
1640 - 1830	UI	335
1840 - 1999	KL	276
2000 - 2140	QS	503
2150 - 3100	VW	420
3110 - 3260	GE	448
3300 - 4020	XC	313
4030 - 4190	NV	164
4200 - 4280	KK	93





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<p><i>Math Quiz</i></p>	<p>High School</p> 

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SoftSideTM

ADVENTURE

SERIES



Issue 43 Adventure: High School

Who said that going to high school is not an adventure? You must go to all your classes, and complete all the activities before earning credit. Satisfy your teachers' requirements, pass six subjects, and graduate. Don't get suspended too often, or you might get expelled!

SoftSide Adventure Series

What would you say to a program that asks, "What do you want to do?" Well, you might say, "GET RUBY" or KILL GIANT", because that's how the *SoftSide Adventure Series* works.

Each issue, the latest Adventure takes you to another world of fantasy, puzzles, and thrills. Your first task is often simple survival — and even that basic feat can be daunting until you figure out the *right* way to do it. You'll have to be ingenious and persevering, and your rewards will be great.

To "win" a fantasy/adventure game, you must solve the author's devious puzzles, and overcome the obstacles that confront you — whether they be dragons or desperadoes. Death, should it come, is transitory — just re-run the program to live again!

Experienced adventurers make detailed maps of each world as an aid to effecting a solution, but you can omit this exercise if your memory is exceptional. Express your wishes with one- or two-word commands like, "LOOK", "DROP KNIFE", or "GET RUBY". Use "I" to get an inventory of your possessions. The introduction to each Adventure explains this more fully.

To start up the Adventure, just run the program called "INTRO" or "INTRO.BAS" on your disk, or select the Adventure from the DV menu. On cassette, the INTRO program is the one just before the Adventure, which is the last program on the tape.

The Adventure runs in any Atari with at least 32K RAM (40K disk).

Here are the encrypted hints for *Arabian Nights*, the Adventure in Issue 42.

To kill the dragon: DVZI ZMW IFY GSV IRMT.

To kill the serpent: DVZI ZMW IFY GSV ZNFOVG.

To kill the snake: FHV GSV HVIKVMG PROOVI.

To kill the Roc: FHV GSV HXRNRGZI.

To kill the cyclops: HSLLG SRN DRGS GSV WRZNLMW ZMW GSV HORMTHSLG.

To get past the vultures: WIRMP LNZI'H DZGVI.

To kill the red genie: LUUVI SRN Z TLYOVG UFOO LU VO SZYRY'H DZGVI.

To kill Roxor: IFY GSV NZTRX OZNK.

To get the eggshell: XFG GSV VTT DRGS GSV HXRNRGZI.

Open doors and gates by: SRGGRMT GSV TLMT.

To escape from Roxor's secret room: SRG GSV TLMT.

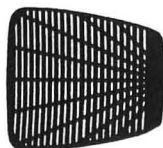
To get the magical cloak: TREV GSV TLYOVG GL GSV HSLKPVVKVI ZUGVI PROORMT GSV IVW TVMRV.

In sandy places: WRT ULI ZOO BLF'IV DLIGS.

To fly the magic carpet: HGZMW LM RG ZMW HZB ZDZB.

General Information About Listings, SWAT, and Magnetic Media

These are the standard procedures for the programs published in **SoftSide Selections**. Sometimes, a particular program does not lend itself to these procedures. Always read the specific instructions accompanying a program. They will instruct you if there are any variances from the following procedures. Also, back issues of **SoftSide Magazine** may differ in some details.



SWAT TABLE

SWAT Tables

At the conclusion of each program listing in **SoftSide Selections**, we include a **SWAT (Strategic Weapon Against Typos)** Table. **SWAT** for the Atari appeared in **SoftSide** Issue #30. If you missed Issue #30, we'll send you a free reprint of **SWAT**. Send a self-addressed, stamped envelope to:

SoftSide Publications, Inc.
Department **SWAT**
10 Northern Blvd.
Northwood Executive Park
Amherst, NH 03031

Be sure to tell us that you have an Atari computer.

Magnetic Media

Disks do not carry the **DOS.SYS** and **DUP.SYS** files, and are not "bootable." First, boot a disk with **DOS** on it, then insert the **SoftSide Selections** disk, and run "**D:COVER**". Our disks are in **DOS 2** format.

Tapes **CLOAD** in the normal manner. If you encounter difficulty, try this procedure:

1. **POKE 54018,54**
2. Turn up the volume on your TV.
3. Type **CLOAD**, and press **RETURN** once.
4. Press the play button, and listen.
5. When you hear the steady leader tone, press **RETURN** again.

Side two of the tape is a duplicate of side one.

SoftSide Selections disks and tapes are duplicated on reliable, professional equipment. Bad copies are exceedingly rare. Nevertheless, the trip through the mail occasionally results in damage to the sensitive magnetic media. If, after a reasonable number of attempts on well-adjusted, clean equipment, you are unable to load a program, return it to us along with an exact explanation of your problem. We will send you a replacement.

SoftSide Selections media are not copy protected. We urge you to make an archival backup copy of your disk or tape as soon as you receive it, as our replacement policy is valid only for 30 days. Please resist the urge to give away copies of copyrighted material.

Line Listings

Line listings are in standard 38-column format, with special conventions for representing unprintable characters:

You must type underlined characters, including blank spaces, in inverse video.

When graphics or control (CTRL) characters are included in a string (between quotation marks), a nearby REM statement will make note of it; in such cases, graphics characters appear as the corresponding lower-case letters, and control characters appear as the corresponding unshifted key symbols. For example: the lower-case letter **s** represents a graphic cross, which you type by pressing the S key while holding down the CTRL key; the **=** sign represents CTRL-down-arrow, which you type by pressing and releasing the ESC key, then pressing the **=** key while holding down CTRL. For more information about entering control characters, refer to Appendix F and the back cover of your **Atari BASIC Reference Manual**.

There are two exceptions to our above convention: A clear-screen character (ESC SHIFT-CLEAR) appears in our listings as a right-hand brace, which looks like this: **}**. The other exception is that a shifted **=** sign appears as a broken vertical line: **|**.

Occasionally, a program will demand that we vary from these conventions. In such a case, a nearby REM statement or the program's introductory article will clearly note the special instructions.

Be sure to read each program's explanatory article — it may contain special, important information about the program. Also, use **SWAT** on your program, and get the free reprint if you don't have **SWAT**.

System Requirements

The necessary memory and other equipment you need to run a program are listed in the introductory paragraph of the article for each program. (Also see the **SoftSide Adventure Series** elsewhere in this booklet.)



SoftSideTM Selections

Here's **SoftSide Selections**, the handy, pull-out booklet with program listings for your Atari 400/800/1200 computer. This issue, **SoftSide Selections** for the Atari features:

- **Relaaax...** — **SoftSide** has brought you many programs that may keep you up at night. Now, two psychologists have developed this program to help you relax.

- **Math Quiz** — This colorful educational program can help kids practice their arithmetic.

- **Atari DV Bonus Program: Chemistry Assistant** — This educational program performs over ten common chemical calculations.

- **The SoftSide Adventure Series** — by David Pleacher.

You are in high school, and who said that going to high school is not an adventure? Go to all your classes, and complete all the activities before earning credit. Don't upset the assistant principal, or you might get suspended — or even expelled! Satisfy your teachers' requirements, pass six subjects, and graduate!

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