The Soma Cube
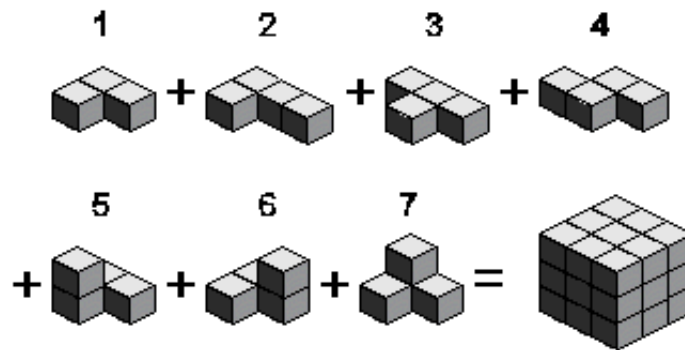

The SOMA cube was invented by Piet Hein, a Danish poet, dreamer, mathematician and genius; way back in 1936. The puzzle did not become popular in the 'States until 1969 when Parker Bros. packed and shipped it as the "3-D answer to Tan-Grams". Sadly, the disco-erazoic Soma Cube was smothered away into extinction by another puzzle during the pre-rappazoic period. I'm not knocking the Rubik's cube, but it has only ONE solution. SOMA offers many more...

Why did I dedicate this page to this ever so archaic and obsolete puzzle? Well, to tell you the truth, there isn't much of anything else out there. Check out my list.

For all you SOMA freaks - a present! Click on the line(s) below to download your copy of **Solve101**, in virus-free freeware! Written in high-tech cutting-edge QBASIC.

See how the fantastic program solves any SOMA structure in a matter of seconds!
Prepare to be stunned in total awe as it solves regular, split and partial figures!
Watch the program crumble your dreams of ever solving the infamous W-Wall by proving it impossible!
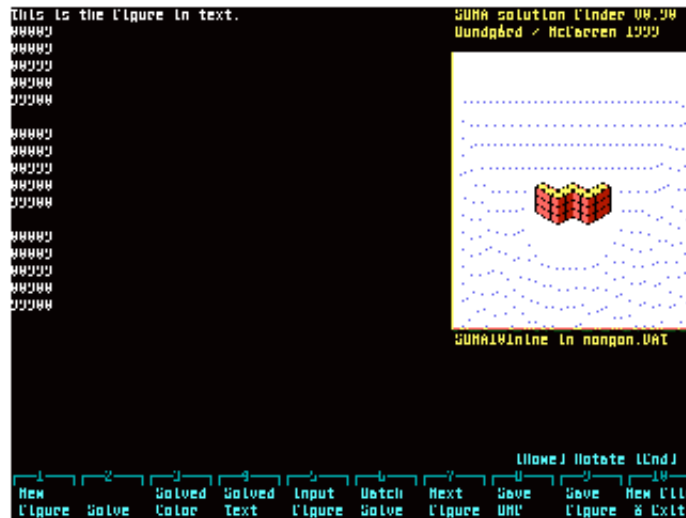**Amaze your friends!**

Download the nifty Soma-solving program now in **QBASIC** or compiled **EXE** format.
Oops! You'll need these **DATA** files, too!
...and finally, a cool **ICON** for you to use.
(Do 'cool' people actually use the word 'cool' anymore? I don't know...)

If you have any problems, either e-mail me, read the tutorial or visit the ultimate SOMA site for help.

An exciting scene from Solve101

NEW AND IMPROVED! Thorleif Bundgaard has just upgraded the program to version 1.21. **Solve121** includes the *tilt* and *multi-solve* features; plus it solves (or finds impossible) regular, split and partial figures in a matter of seconds. Hold your breath and don't get too excited; it can *now* display SOMA+ figures (but not solve them... yet!). This zipped file contains everything you need in a single download.

File name: **Solve121.zip**
File size: 84K
Contents:

- SOLVE121.EXE (DOS Soma solving program)
- SOLVE121.BAS (QBASIC source code)
- SOLVE121.HTM (data file; 4 test Soma figures)
- FIGS1-36.HTM (data file; original 36 Soma figures)
- FIGSPLUS.HTM (data file; 2 sample Soma+ figures)
- READ-121.TXT (revision history)

Installation instructions: Unzip the contents of SOMA121.ZIP into any one directory (easy!).

...And for you Windows[TM (C) (R)] **fans:** Bob Nungester created a **Windows Soma Program** in his secret laboratory that can solve (or find impossible) regular, split and partial figures in less than 1/8 second. To solve DOUBLE-SET figures (yes, *double-set* figures), downlown the **upgrade**, which also contains the latest Single-Set Soma-Solving version (try to say *that* 10 times fast).

NOTE: Even though the single-set solver is rather speedy, the double-set solver can take hours to run. Do not be alarmed, as this is actually considered a break-through in Soma technology.

File name: **SOMAW.ZIP**   *File name:* **SOMA16.ZIP**

File size: 1.5M
Contents:

- SETUP.EXE
- SETUP.LST
- SOMA.CAB

...(setup files)

File size: 133K
Contents:

- SOMA.EXE & .CFG (single set solver)
- DBLSOMA.EXE & .CFG (double set solver)
- POLYFIGS.EXE & CFG (18-omino generator)
- SOMACOMP.EXE (data file comparison program)
- ONESET.HTM (single set data file)
- TWOSET.HTM (double set data file)
- 36 & D.HTM (single & double set data files)
- 8SYM16X3.HTM (18-omino data file)
- 4SYM16X3.HTM (18-omino data file)
- 4SYM18X3.HTM (18-omino data file)
- 2SYM18X3.HTM (18-omino data file)
- MANUAL.DOC (instruction manual)

Installation instructions: Unzip then contents of SOMAW.ZIP into any one directory. Run SETUP.EXE and answer using the defaults. Reboot. Unzip SOMA16.ZIP and overwrite the contents in your *C:\Program Files\Soma* directory. You will have to use your Windows expertise to include the double-set solver in the *SOMA Figure Solver* program group. As more upgrades arrive (i.e., SOMA17.ZIP, SOMA18.ZIP, etc.) it is not necessary to download or re-install SOMAW.ZIP again.

Eduardo Prez has written a Soma solving program in QBASIC which generated over 500 figures, along with the number of all possible solutions as well. Later on, Mr. Prez developed a Soma viewer, which in turn displays all of the 500+ figures but does not reveal the entire answer; it does however supply a single hint... the position of anyone of the 7 pieces. The idea? To solve each figure with the mind! No hint is provided for any figure that possesses less than 10 solutions, as those are easy enough to solve on the surface.
NOTE: Installation for Windows Millenium only.

File name: **SomaPrez_Vb6_DOS.ZIP**
File size: 1.77M
Contents:

- setup.exe
- Setup.lst
- Soma-DOS.pif
- Soma-Vb6.CAB
  - Asycfilt.dll
  - Comcat.dll
  - msvbvm60.dll
  - Oleaut32.dll
  - Olepro32.dll
  - Rchtxes.dll

File name: **MANUALES.ZIP**
File size: 933K
Contents:

- xcaso-bn.zip
  - soma-pag01.bmp
  - soma-pag02.bmp
  - soma-pag03.bmp
  - soma-pag04.bmp
  - soma-pag05.bmp
  - soma-pag06.bmp
  - soma-pag07.bmp
  - soma-pag08.bmp
  - soma-pag09.bmp

- Riched32.dll
- Richtx32.ocx
- Setup1.exe
- soma.ico
- Soma-dos.exe
- Somaprez.dat
- Soma-Vb6.exe
- St6unst.exe
- Stdole2.tlb
- Vb6es.dll
- Vb6stkit.dll

File name: **SomaPrez_DOS.ZIP**
File size: 71.1K
Contents:

- Soma-dos.exe
- Somaprez.dat

- soma-pag10.bmp
- soma-pag11.bmp
- soma-pag12.bmp
- soma-pag13.bmp
- soma-pag14.bmp
- soma-pag15.bmp
- soma-pag16.bmp
- soma-pag17.bmp
- xsolu-bn.zip
  - soma-pag18.bmp
  - soma-pag19.bmp
  - soma-pag20.bmp
  - soma-pag21.bmp
  - soma-pag22.bmp
  - soma-pag23.bmp
  - soma-pag24.bmp
  - soma-pag25.bmp
  - soma-pag26.bmp
  - soma-pag27.bmp
  - soma-pag28.bmp
  - soma-pag29.bmp
  - soma-pag30.bmp
  - soma-pag31.bmp
  - soma-pag32.bmp
  - soma-pag33.bmp
  - soma-pag34.bmp

Yet another Soma solver...

File name: **BCSolve082.zip**
File size: 169K
Contents:

- BD026050.HTM
- BP001025.html
- D026050.HTM
- LS001.HTM
- SP001025.HTM
- A026050.HTM
- BP001025.htm
- D001025.HTM
- DS001025.HTM
- bed.fig
- cube3.fig
- cube4.fig
- cubit3.fig
- cubit4.fig
- doublecube.fig
- flatE.fig
- Example.bat
- BCSolve082.exe

Written in C++ by Bruce Cropley, this program can solve **single and double SOMA sets** *within a fraction of a second,* along with SOMA+ and BEDLAM figures!! Write to the author , or go visit **Thorleif's SOMA Page** for further details.

View some SOMA structures

Castles & Pyramids (116 total)	5-Based Crystals (115 total)	4-Based Crystals (175 total)	3-Based Crystals (82 total)
Figure set # 01	Figure set # 07	Figure set # 13	Figure set # 22
Figure set # 02	Figure set # 08	Figure set # 14	Figure set # 23
Figure set # 03	Figure set # 09	Figure set # 15	Figure set # 24
Figure set # 04	Figure set # 10	Figure set # 16	Figure set # 25
Figure set # 05	Figure set # 11	Figure set # 17	
Figure set # 06	Figure set # 12	Figure set # 18	
		Figure set # 19	
		Figure set # 20	
		Figure set # 21	
Zig-Zags (108 total)	**Walls & Wells (188 total)**	**Spirals (97 total)**	**Nonominoes (1069 total)**
Figure set # 26	Figure set # 33	Figure set # 41	Figure set # 46
Figure set # 27	Figure set # 34	Figure set # 42	Figure set # 47
Figure set # 28	Figure set # 35	Figure set # 43	Figure set # 48
Figure set # 29	Figure set # 36	Figure set # 44	Figure set # 49
Figure set # 30	Figure set # 37	Figure set # 45	Figure set # 50
Figure set # 31	Figure set # 38		Figure set # 51
Figure set # 32	Figure set # 39		Figure set # 52
	Figure set # 40		Figure set # 53
			Figure set # 54

Figure sets #49 thru 54 are NONOMINOES, which are like TETRIS pieces; but instead of 4 squares there are 9. If you stack a 9'moe three cubes high, then you have a 27-cube SOMA structure. Out of the 1285 possible 9'moes, 1069 of them are solvable SOMA structures.

Download the input text files for these structures, and calmly watch Solve101 or Solve 121 unravel their secret mysteries in a hyper-active way (no ADD medicine required):

File name: **Solve92a.zip**

File size: 26K
Contents:

- CASPYR.HTM ...Figure sets no. 01 thru 06
- CRYST5.HTM ...Figure sets no. 07 thru 12
- CRYST4.HTM ...Figure sets no. 13 thru 21
- CRYST3.HTM ...Figure sets no. 22 thru 25
- ZIGZAG.HTM ...Figure sets no. 26 thru 32
- ZIGZAG.HTM ...Figure sets no. 26 thru 32
- WLLWLL.HTM ...Figure sets no. 33 thru 39
- WLLWLL8.HTM ...Figure set no. 40 (my last contribution to the SOMA world)
- SPIRAL.HTM ...Figure sets no. 41 thru 45
- NONGON.HTM ...Figure sets no. 46, 47 & 48 (the symmetrical 9'moes only; not the entire list of 1069)
- SOLVE92A.BAS ...an old tailored version of Solve 91; this is the version that I personally use. *__Warning__* It slightly strays from the original color code, and does NOT include the *tilt* function; one of the best features Mr. Thorleif Bundgaard has added onto revision 121.

Visit *other* SOMA sites:

Ross Canning offers freeware for the polyomino classics such as Cubix, Pentacubes, and Blackbox; all available at his single-paged site: **Free Games and Puzzle Programs**.

It also offers a rather clever Windows SOMA Solver that should belong in every household computer. It does not solve *splits* or *partials*, but it works extremely well for *regulars*. Simple to install, simple to use, and memory-wise a real space saver (500K installed, 250K zipped).

Marc Moerig hosts a website entitled and including the co-authored **Somatic**, which can solve any Soma type puzzle, regardless of the number or size of the polyomino animals involved, as long as the final structure does not exceed 64 cubelets. *Splits and partials are welcome.*

Visit the *ultimate* SOMA site:

In the meantime, you can educate yourself on the SOMA cube by visiting **Thorleif's SOMA Page**, maintained by my good friend Thorleif Bundgaard, who co-wrote the solving program with me. You can also download the SOMA-solving program (in *.BAS ~or~ *.EXE format) from there, along with **instuctions on how to run the program**. This is a ***HUGE*** SOMA site, with over 2000 figures to view, the original Parker Bros. (and Danish!) booklet, history, theories, proofs, newsletters... and much, much more! It is also the home of (or links to) all SOMA related freeware and java available on the WWW.

[History of the Soma Cube](#)
[What the World has to Offer](#)
[Solve101 Tutorial](#)
[The Making of Solve101](#)
[How Solve101 Works](#)

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