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## Entering Guesses

Guesses are entered in the “YOUR GUESSES” box. You may press the buttons in the on-screen alphabet using the mouse or you may type letters at the keyboard.

The red cursor box shows where the next letter that is pressed will be placed. The presence of the cursor also indicates that you are in the “Enter Guess” mode. If you change to the “Access Alphabet” mode, the cursor will not be present.

The “Blank” button or SpaceBar can be pressed to place a blank at the current cursor position.

The left and right arrow buttons on either side of the “Blank” button will move the cursor left and right, respectively. The keyboard left and right arrows perform these same functions. The Backspace key also functions as a left-arrow key.

When you have placed all of the letters for your guess, click on the “Enter” button with the mouse or press the “Enter” key on the keyboard.

If there are any blanks remaining in your guess when you press “Enter”, the computer will beep and place the cursor at the first blank to prompt you to fill in the blank.

If no blanks are in your guess when you press “Enter”, your guess will be moved to the top of the scroll window just below the “YOUR GUESSES” box. You will be told how many of the letters in your guess are in the unknown word, and how many of those correct letters are also in the correct position.

If you have the Dictionary Feature enabled (Registered Version only), the letter combination that you entered must be a valid word found in the BrainStrain or USER dictionaries. If the word cannot be found, you will be told so and have the chance to enter a new word or add the word to the USER dictionary if you know that IT IS A WORD.

You have a maximum of 100 guesses to guess the unknown word. When you reach 91 guesses, a small box will appear on the screen telling you how many guesses you have remaining.

The timer in the lower right corner of the screen keeps track of how long it's taken you for the present game. If you Pause the game, the timer stops until you return to the game. If the timer reaches 99:59, it remains at 99:59.

## **Pausing the Game**

By clicking the "Pause" button with the mouse, or by pressing F5, you will pause the game. A blue screen will appear covering the entire playing area. While paused, the timer is stopped.

To return to playing the game, click on the "Return to Game" button, or press the "Enter" key.

## Configuring Word Parameters

To configure the word length, word difficulty, and word complexity, click on the “Configure” Menu Item prior to entering your first guess (after your first guess, you cannot access the “Configure” Menu). Then select “Word Parameters”.

You will be presented with a configuration box which has three selectable values; one each for word length, difficulty, and complexity.

Using the mouse, simply click on any of the numbers next to the parameter(s) you want to change, then click “OK”. You do not need to click on the titles “Word Length”, “Word Difficulty”, or “Word Complexity”.

Using the keyboard, the UP and DOWN arrows (or LEFT and RIGHT arrows, or the TAB key) allow you to highlight which word parameter you want to change (“Word Length”, “Word Difficulty”, or “Word Complexity”), then type the number that you want to change that word parameter to. Repeat this for the other word parameters. When done, press “ENTER”.

The box below the selectable values explains everything about the word you will be guessing.

When you are finished with your selections, press the “OK” button or press “ENTER”. Any time you exit the “Configure Word Parameters” box by pressing “ENTER”, the game timer resets itself to “0:00”.

If you wish to exit the configuration box and resume playing using the original selections, click on the “Cancel” button, or press the “ESC” key.

## Configuring Dictionary Use

(The Dictionary feature is not available in the Shareware Version).

To enable or disable the use of the BrainStrain and USER dictionaries, click on the "Configure" Menu Item prior to entering your first guess (after your first guess, you cannot access the "Configure" Menu). Then select "Dictionary Use".

You will be presented with a configuration box which explains the way that the dictionaries can be used to improve the play of BrainStrain.

Using the mouse, simply click on your choice to use the dictionaries or not use the dictionaries. You can also use the arrow keys to make your selection.

Your choice of using or not using the dictionaries is stored on disk in the CONFIG.BSW file so that you will always play the game the same way unless you choose to change it.

When you are finished with your selection, click on "OK" or press the "ENTER" key.

## **Eliminating, Highlighting, and De-Selecting Letters**

After you have guessed a few words, you will determine that some of the letters cannot be in the unknown word, or that you have found some of the letters. By clicking on the "Access Alphabet" button, (or by pressing F2), you will be able to eliminate, highlight, and de-select letters.

When you do click on "Access Alphabet", that button will change and flash "Return to Guessing". When you are done eliminating, highlighting, and de-selecting letters, press the "Return to Guessing" button (or F2 again) to enter a new guess.

Three option buttons appear in the Alphabet Access box. Select whichever function you want. Then, when you click on any of the on-screen alphabet letters, that alphabet letter and any places where that same letter appear in the scroll window will change color according to the function selected.

You can de-select all letters at once by clicking on the "De-Select All" button. This is quite helpful when you've made a complete mess of things and need to start over with your eliminations and highlights.

You can click on the letters in the scroll window, but doing so will only affect the single letter on which you click. This is helpful to further isolate letters in a word when there are duplicate letters in a guessed word.  
(See [example](#)).

## Using the Keyboard

<b>Key(s)</b>	<b>Function</b>
A to Z	Used to enter guesses and to eliminate, highlight, or de-select letters in the on-screen alphabet and in the scroll window.
0 to 7	Used only in the "Configure Word Parameters" box to select parameter values.
Right Arrow	Moves the cursor right one position.
Left Arrow	Moves the cursor left one position.
Backspace	Same as left arrow.
Space Bar	Places a blank at the cursor position.
Enter	Tells the computer that you've finished entering your guess.
ESC	Exits the "Configure Word Parameters" box without making any changes.
F1	Access Help.
F2	Access Alphabet.
F5	Pauses the Game.
ALT-C	Accesses the Configure Menu, but only if done before the first guess is entered.
ALT-Q	Accesses the Quit Menu.
ALT-H	Accesses the Help Menu.
ALT-S	Accesses the Soleau Games Menu.

## **General Instructions**

### **WELCOME TO BRAINSTRAIN!!**

BRAINSTRAIN is a word guessing game. It's like a cross between MasterMind and Hangman. You choose the word length and difficulty levels, and the computer will choose a word from its word list of about 165 words to match your choices. (There are over 4500 words in the Registered version).

To win the game, you must guess the unknown word by guessing words of the same length as the unknown word. The computer will tell you how many letters are common between your guess and the unknown word. It will also tell you how many letters are in the correct sequence.

By guessing different words and using some logic and deduction, you should be able to figure out the unknown word.



## History of BrainStrain

This Windows version of BrainStrain, written in Visual Basic, is actually a culmination of MANY versions written in the past on many different computers. My friends and I used to play a five-letter version of this game back in high school (in the early 1970's) which was called JOTTO. I don't know who invented JOTTO, but if anyone does know, PLEASE write to me so that I may provide the proper acknowledgement in future versions.

JOTTO was played by two people, each with a piece of paper, set up as shown (you may need to widen the HELP window to see the entire form):

(your word here) _ _ _ _ _	NUM COR	IN SEQU	_ _ _ _ _	NUM COR	IN SEQU
opponent's guesses here			your guesses here		
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z					

The alphabet is there to cross out letters that aren't in the unknown word, or to circle possible letters that might be in the word.

Each person would then think of a five-letter word and write it at the top of the left "guess" column and fold the top left half of the paper over so the other person couldn't see the word. Each person would take turns guessing five-letter words, just like in BrainStrain, and the other person would tell how many letters were correct and how many were in sequence, BUT YOU HAD TO BE VERY CAREFUL! I can't tell you how many games were nullified because someone gave the wrong information for the number of letters correct or in sequence. ("But I thought you said 'QUEST' was THREE CORRECT and TWO IN SEQUENCE!!!"). That's what's so great about a computer version; it ALWAYS tells you the correct information.

Try playing JOTTO as described with someone. It's great!

I wrote a version of JOTTO in 1974 for the high school's PDP-8 main-frame computer (the information was output on a teletype). I also wrote a version for my brother's Ohio Scientific personal computer. In 1987, I even tried to get an Apple II BASIC version published by two different software companies, but neither company was interested.

In 1989, I purchased a 286-AT computer. Soon after that, I started on a Shareware version for DOS, written entirely in assembly language, which took three years to write. This version had many more enhancements over all previous versions, especially in it's use of color (there wasn't a heck of a lot I could do with just a black and white screen or a teletype on the previous versions!). I added the 3-, 4-, 6-, and 7-letter words which added a range of difficulty levels. It's much harder to think of 7-letter words for your guesses than 3-letter words!

In 1994, I purchased a 486 computer and tried getting into Windows programming using C++. After a year of struggling and not getting anywhere with with C++, I purchased Visual Basic, and it only took 5 months to generate Version 1.0.

In July of 1995, I contacted the people at Soleau Software and asked them if they'd like to see my program. They agreed and liked it enough to include it in their product line.

I want to thank Bill Soleau and Kevin Santee of Soleau Software for their wholehearted support and for their suggestions on improving Version 1.1, which became Version 2.0.

I also want to thank Bob Sweezey who has been my beta tester and a provider of a host of suggested improvements.

Finally, I want to thank my wife and daughter, Laura and Jennifer, for allowing me to spend countless hours at the computer working on this program.

If you have any comments or suggestions, feel free to write to me at this address:

Robert Paehr  
P.O. Box 586  
Islip, NY 11751

I hope you enjoy BrainStrain and I thank you for your support!

Robert E. Paehr

## **Word Length**

The word length defines how many letters are in the unknown word that the computer selects. You will be guessing words that have the same length as the unknown word. Words can have from three to seven letters. Keep in mind, it is much more difficult to think of seven-letter words for all of your guesses than three-letter words.

## **Word Difficulty**

There are up to three levels of difficulty for the unknown words. Generally speaking, the level numbers, 0, 1, and 2 correspond to grade school, middle school, and high school vocabulary levels, respectively.

## **Word Complexity**

The word complexity value tells you how many repeating letters there MAY be in the unknown word. A Level-2 word MAY have two repeating letters, such as "LETTER" (one repeating "E" and one repeating "T") or "GEESE" (two repeating E's), but a Level-2 word may only have one repeating letter, or even no repeating letters. Complexity, just like word length, also adds to the difficulty level. For reference, the complexity LEVEL value can be seen in the lower right corner of the play area.

## Highlight/Eliminate Example

For example, let's say that you have guessed the word GEESE and you know that there is only one "E", and you also know that the "E" cannot be in the first "E" position (after the "G"). After all of the E's have been highlighted, select "Eliminate Letters" and click only on that first "E" in the scroll window. You will eliminate only that one "E".

## Help Balloons

When you are first learning how to use the program, you may find the “Help Balloons” useful.

Help Balloons are turned on by clicking on the “Show Help Balloons” item in the Help Menu (a checkmark will appear next to the menu item if you re-enter the Help Menu).

The Help Balloons are text boxes which appear when you leave the mouse pointer on an area or control for a short time. The information which is presented tells you what’s what on the play screen and what the different controls will do at the present time.

To turn off the Help Balloons, simply click on the “Show Help Balloons” again. The menu item will become unchecked.

## **Other Stuff**

We hope that you become addicted to BrainStrain, however, we are not responsible for headaches or other pains resulting from sitting for long hours trying to figure out those unknown words. We would like to suggest taking breaks every half hour or so (a good time to use the PAUSE function!!).

Although this program has been extensively tested, the author cannot be responsible for any damages which may result from running this program. THE PROGRAM IS PROVIDED "AS-IS". NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, ARE MADE AS TO IT OR ANY MEDIUM IT MAY BE ON. THERE ARE NO PROVISIONS FOR INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES ARISING FROM ITS USE, INCLUDING SUCH FROM NEGLIGENCE, STRICT LIABILITY, OR BREACH OF WARRANTY OR CONTRACT, EVEN AFTER NOTICE OF THE POSSIBILITY OF SUCH DAMAGES.



## Registration Information (See [Order Form](#)).

I hope those of you who use this program appreciate the time and effort which goes into planning, coding, debugging, and testing of a program; not only for BrainStrain, but for any Shareware program you may be using.

There have been many versions of BrainStrain (see [History of BrainStrain](#)). The Unregistered Shareware Version of BrainStrain has a limited number of five letter words, and only a handful of words for the other word lengths (165 words total). The Registered Version has a list of over 4500 words, including a much larger list of three, four, six, and seven letter words, that the computer can pick from, depending on your configuration choices. This cuts down greatly the chance of getting repeated words for different games of BrainStrain as you may have experienced with the Unregistered Version.

The Registered Version also features fast opening screens and no closing screen, a dictionary look-up feature that allows only actual words to be entered for your guesses, and the ability to save your game scores by best time AND fewest guesses.

If you have not registered BrainStrain, please register BrainStrain NOW and get special discounts off regular prices of other addictive Windows and DOS Games from Soleau Software. You are encouraged to pass the Shareware Version of BrainStrain to your friends and local BBS. Soleau Software depends upon your registrations to continue producing non-violent, educational, and strategy game software for the computer market. Please support our work by registering your copy today!

If you have any comments or suggestions for improvements, please drop the author a note at the following address:

Robert Paehr  
P.O. Box 586  
Islip, New York 11751

There's nothing like user input to help make a good program even better!

We hope you enjoy BrainStrain and we thank you for your support!

## Revision History

Version 1.0: Released 31-MAR-95.

Version 1.1: Released 8-APR-95.

A last-minute change made just prior to releasing V1.0 caused a slight inconvenience when clicking on the alphabet letters. If you clicked and held down the mouse button on, say, the "A", then dragged the mouse off of the "A" onto the "B" and released the mouse button, no letter would be placed in the guess word. This has been fixed.

Version 2.0: Released 1-NOV-95

- 1) BrainStrain taken under the Soleau Software Label.
- 2) Added Best-Scores capability and Dictionary-Look-Up feature for the Registered Version.
- 3) Made adjustments for Large and Small Fonts (as set by the user's video setup utility).
- 4) Added keyboard input to the "Configure Word Parameters" box.
- 5) Added/Changed the opening and closing screens.
- 6) Other small changes made for smoother operation.

Version 2.1: Released 1-JUL-96

In Version 2.0, if you select GIVE UP in the QUIT MENU and are told the unknown word, and then you select "NEW GAME", the program would do one of several things:

- a) When you type in your first guess and press ENTER, it would not move the guess down to the scroll window and not tell you the number of correct letters or letters in sequence. Instead, it would blank-out part of the last word you guessed, and then show you the unknown word when you pressed ENTER for your next guess.
- b) For registered users, sometimes the Best Scores window would pop up when you press ENTER after starting the new game.

These problems have been fixed in Version 2.1.

I apologize for any irritation this may have caused when playing the game. [R. Paehr]

The installation program was also changed for Version 2.1.





