# Ray's Numbers Game v 2.0 <br> © copyright Ray Le Couteur 1996-1998. 

Thanks to Dan Bystrom for permission to use his custom control DBPush.
It is not free and if you use it beyond a 30 day trial period you must register it.

Note that some of the options described are only available in the registered version.

## Features include:

« Counting, addition, subtraction multiplication, division, and, in the registered version, fractions, decimals and percentages.
« Special section on times tables.
« A wide range of difficulty levels to suit every child.
« Highly motivating game format. Now with 2 bonus games.
" Built in multiplication charts and multiplication tables.
" Work is timed to encourage quick thinking ( 3 speeds available).
« Entertaining graphics and sound effects
« Two bonus games.
" Built in tutorials.

## System Requirements

Any computer running Windows 3.1/3.11 or Windows 95 or above.

## Installation

Simply run the installation program "install.exe". During installation simply follow on screen instructions and answer 'yes' to any queries unless you have good reason.

If you have the self extracting version of the program, simply run "numgame20.exe", instead of "install.exe".

That's it! The programs are now fully installed and ready for use. You will be given an option to run Ray's Numbers Game immediately.

## Running the Program

Win 3.1: Run the Numbers game by clicking on Ray's Numbers Game group which will be on your desktop.
Win95: From the start menu, select programs and then Ray's Numbers Game folder. From here Ray's Numbers Game can be run directly.

Note: The program makes use of the Windows clipboard.
Data stored in the clipboard (eg by the 'copy' command) will be lost.

## Uninstall Information

Ray's Numbers Game does not change your system files and uses the
program folder/directory (Numbers) for all it's own files, except vbrun300.dll, which is copied to the Windows System directory. This file is used by many Windows programs and is best left on your system.

## Skill Levels

Immediately you run the program you are given the option of 3 skill levels: Lower, Intermediate and Higher (registered version only).

## Lower Level

If you choose lower level skills, then you can choose from counting, simple addition or simple subtraction.

## Counting

This option involves counting with the aid of pictures. The highest number to count can be set anywhere in the range 3 to 12 .

## Simple addition

Teaches children to add with the aid of pictures. The highest number to add can be in the range 3 to 7 .

## Simple subtraction

Teaches children to subtract with the aid of pictures. The highest number to subtract can be in the range 3 to 7 .

## Intermediate Level

At the intermediate level you can choose addition, subtraction, multiplication or division.

## Addition/subtraction

Teaches addition or subtraction with the highest number in the range 4 to 100 .

## Multiplication/Division

Teaches multiplication or division with the highest number in the range 3 to 12.In the case of division the highest number refers to the divisor and answer. Children often find learning the multiplication tables difficult and so help is provided: simply click the ' $x$ ' icon to view multiplication tables. However, these must be studied BEFORE starting a game - they are not available once a game is being played.

## Higher Level

At the higher level you can choose recognising fractions, working with fractions, fractions to decimals or fractions to percentages. Each has 3 difficulty levels.

## Recognising Fractions

Teaches recognition of fractions using segments of a circle.

## Working with Fractions

Teaches calculation of fractions of whole numbers.

## Fractions to Decimals

Teaches conversion of simple fractions to decimals.

## Fractions to Percentages

Teaches conversion of simple fractions to percentages.

## Playing The Game

The game is very simple. Each player has a playing grid with a variety of possible answers. Click on the correct answer and one of four symbols (heart, face, umbrella, magnet) will appear. The first player with 5 identical symbols wins. However, if you fail to click the correct answer within the time limit, or click 3 wrong answers in succession, the correct answer will be shown and you will have missed your turn.

## Bonus Games

If a player (other than the computer) wins a game with no errors and without being 'timed out', then you can play one of two bonus games: a simple jigsaw or Matching Pairs; by default, the jigsaw is used as the bonus at the lower level and 'Matching Pairs' at the intermediate and higher levels. However, if you wish you can select to use the jigsaw at any level. ('Matching Pairs' is not available at the lower level or with 'Recognising Fractions').

## The Jigsaw

Simply click on pairs of squares and they swap places. Continue until the jigsaw is complete. The picture can be printed (using most printers). The printer button is then disabled, to avoid misuse. If the jigsaw is played at the intermediate or higher levels, it is made harder by removing the 'mini' picture after 12 seconds.

## Matching Pairs

'Matching Pairs' is a traditional memory game but here it is used for teaching as well! Each panel hides either a sum or an answer, at the current level of difficulty. Panels are clicked in pairs. The aim is to match up a sum and its answer (with matching color). You must reveal all the panels with the lowest possible number of tries. Lowest scores can be entered into the 'Hall of Fame'. There are different low scores for each skill.

However, 'Matching Pairs' is not available at the lower level, or with 'Recognising Fractions'.

## Tutorials (registered version only)

There are short tutorials on division, fractions, decimals and percentages which will help children learn the basics and get more out of the game. In addition, since children often find learning the multiplication tables difficult, they can view one of two multiplication charts. However, the tutorials must be studied BEFORE starting a game they are not available once a game is being played.

## Options

There are three 'Options' : 'Timer sound' - use to switch off the timer sound only;
'Sound' - use to switch off all sound effects; and 'Certificate' which allows the printing of a simple certificate when a game is won (note: not all printers support the printing of a certificate).

## Game Options

Select 'Game Options' from the menu bar, to view your current game options (type of sum, level, speed etc), change these game options or begin a new game (of the same type).

## ? and $x$ icons

These two icons, which appear at the bottom of the screen at intermediate and higher levels, give children access to a simple calculator ('?' icon) and an interactive set of multiplication tables ('x' icon). These will allow your child to find out answers he or she missed. Neither of these is available during a game.

Note: the calculator is intended to be very simple (to make it easy to use and understand) - for example, the maximum number input is 9999 , and answers are given to different numbers of decimal places, depending on their size.

## Date

When a game is won, the day and date will be displayed. If the date is wrong, then this is due to a wrong date setting in Windows: this can be corrected via the control panel (from the start menu, select settings $>$ control panel $>$ date/time).

## What's new for version 2.0?

1. Two bonus games: a simple jigsaw and 'Matching Pairs' have been added for anyone (other than the computer) who wins a game with no errors.
2. At the lower level, the answers are spoken out loud.
3. New and improved sound effects.
4. Current game options can be saved when you exit, so removing the startup screens for level, type of sum and and name.
5. 'Intelligent' number selection ensures fewer passes during a game.
6. A simple calculator is now included (not available DURING a game).
7. An option to print a simple certificate when a game is won.
8. Addition and subtraction is now up to 100 , rather than 60 (so, even more levels!).
9. For more difficult addition and subtraction (26 and above), the sums have been placed one on top of the other, to make calculation easier.

## Warranty Disclaimer

These programs and documentation are provided "as is" and without any express or implied warranties. I have run the programs on a number of machines but cannot possibly anticipate all possible variations of software and hardware that the programs may be run under. Therefore, the user must assume the entire risk of using these programs. Under no circumstances will I be liable for any damages arising from the use of, or inabilty to use, these programs.

Ray Le Couteur, April 1998

