

ATOMS



Atoms is a simple puzzle game that's easy to learn and play. It also involves a little strategy and luck. Overall, it is a puzzle. The strategy comes in when trying to find the atoms in the shortest time. You are lucky if you don't have some setup that requires guessing! It also has the most important characteristic of a good game, ITS FUN!

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Atoms:

A Great Little Game...

Overview

Atoms begins by displaying a grid, and your objective is to locate all the atoms hidden there as quickly as possible. To accomplish this task, you have two tools: Winon emitters and your mind. The Winons are explained here, your mind...that's for you to figure out.

To locate the atoms using these limited tools, use the following approach:

- 1 Fire a Winon into the game board by clicking on buttons around game grid.
- 2 Examine Exit point of Winon.
- 3 If the Winon was deflected in some way, find where the atom(s) are that caused the deflection.
- 4 Place a tag over each atom's location to mark it.

Continue to fire Winons into the grid and mark atoms until you have tagged all of the atoms. When you have correctly placed tags over all of the atoms, the game ends.

You can use the counters at the top of the playing area to keep track of your progress.

The counter in the upper-left corner of the playing area initially shows the number of atoms hidden in the grid. Every time you place a tag over a suspected atom, the counter number decreases by one, showing how many atoms still must be tagged.

The counter in the upper-right corner of the playing area is a timer, which displays your playing time in seconds. The faster you find all the atoms, the better your score.

Atoms is based on a game played on an old HP calculator.

Related Topics

- ◆ [Playing Atoms](#)
- ◆ [Rules of the Game](#)
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Winon:

A small sub-electronic particle found only in the Windows environment. Winons can be used to find the location of imaginary atoms by monitoring their movement through a game grid.

Tagging a Grid Square

Use a tag symbol, , to mark the suspected location of an atom on the gaming grid.

→ Point to the grid square and click the left mouse button. A tag symbol will be displayed.

Note: To remove a tag, move the cursor to the grid square and click the left mouse button again.

Playing Atoms

The object of Atoms is to find all atoms hidden in the gaming grid as quickly as possible. The following section explains how to play Atoms.

To choose a skill level

- From the Game menu, choose Easy, Intermediate, Hard, or Impossible. The higher the skill level, the more atoms there are and at the two higher levels, the game grid is larger.

To start a new game

- From the Game menu, choose New, or press F2. Or you can click the button at the top center of the game board.

To fire a Winon particle

- Click on a button around the game board. Two methods are used aid in locating input and exit points of the Winon particles. The input point button and the exit point button, if there is an exit button, are marked with the same letter or number. The letters are permanently displayed for the entire game. Red dots are also displayed to make it easy to spot the input and output points of the current firing. The current dots are erased when the next button is clicked.

Note: You can always come back and click on buttons previously clicked. The red dots will be redisplayed for that button.

To tag a grid square

- Point to a grid square and click the left mouse button.

Note: To remove a tag, point to the tag and click the left mouse button again.

Atoms minus tags count

- The number in the upper left displays the number of atoms minus the number of tags. As tags are placed, this count is decremented. If, when the count reaches zero, all tags are correctly placed, the game will end. The count will go negative if too many tags are placed.

To Give Up

- From the Game menu, choose Give Up, or press F3. If Show Rays is selected in Setup menu, atom locations and Winon traces will be shown on the game grid.

Related Topics

- ◆ [Overview](#)
- ◆ [Rules of the Game](#)
- ◆ [Scoring](#)
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Rules of the Game

Atoms Rules:

- The playing area is the game board, displayed as a grid of squares. When the game begins, several atoms are hidden on the game board. The number displayed in the upper left is the number of atoms hidden on the grid.

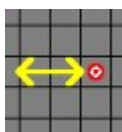


The game grid.

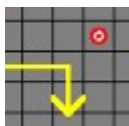
- Fire a Winon into the game grid by clicking one of the buttons around the edges of the game board. The Winon enters the game board perpendicular to the edge of the board, i.e., it goes straight in. After passing through the game grid, the Winon exits the game board. By examining the entry and exit points of the Winons, you can tell where atoms are.

Note: The entry and exit points may be at the same location.

- If the Winon encounters an atom as it is moving through the game grid, it will be deflected in some way depending on how it encounters the atom. By examining how the Winons are deflected, you can find where the atoms are hidden. The path of a Winon can be very complex. See the Strategy and Hints section for examples of complex paths.



When a Winon encounters an atom head-on, it reverses course.



Winon deflects 90 degrees when encounters an atom one grid away.



Atoms at the edge of game grid can deflect Winons causing them to exit through the end of the button row.

Note: Tags are shown to denote atoms.

- Tag the grid locations where atoms are hidden by clicking on the grid location with the left mouse button. A tag will then be displayed. You can also remove a tag by clicking on it with the left mouse button.



An atom Tag.

- As atoms are tagged, the count in the upper left corner decrements.
- When all atoms are correctly tagged, the game ends. If Show Rays is selected in Setup menu, atom locations and Winon traces will be shown on the game grid.

- If you have the fastest time for the difficulty level played, you can enter your name for the Best Times list. This list can be displayed any time by using the Best Times menu item in the Games pull-down menu.

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Scoring

Atoms scoring is simple. The counter in the upper-right corner of the playing area shows your playing time. The faster you find all the atoms, the better your score.

→ From the Game menu, choose High Scores to see the best times for each skill level.

Strategy and Hints

To give up

- Select Give Up in Game menu or hit F3 button. If Show Rays is checked in Setup menu, atom locations and Winon traces will be drawn on the game board.

To display atoms hidden in the grid during a game

- Click the right mouse button anywhere in the Atoms window. Grid location with atoms in them are identified by small black dots in the upper left corner of the grid box. Click on the right mouse button again to remove the dots.

Note: Scoring will be disabled for any game where atoms have been displayed this way.

Unsolvable games

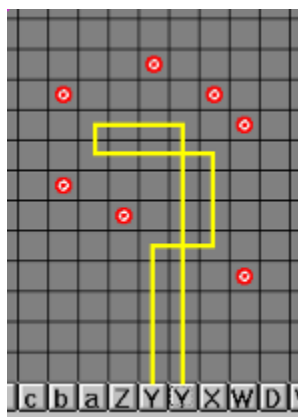
- Sometimes, you just won't be able to find all of the atoms because some atoms may be shielded from Winons by other atoms. You have three choices: guess, give up, restart, or display the atoms. If you do want to guess where missing atoms are, you can usually narrow down the possibilities to a few grid squares. This is the only aspect of luck involved in the game. If you get one of these setups, you are UN-lucky!

Strategy

- Strategy in Atoms, is trying to find the atoms in the fewest possible moves (clicking the Winon emitter buttons), thereby getting the best time. By carefully looking at previous Winon paths, you can usually pick out some buttons that will not give you any real information if clicked. An example would be the button right next to an atom on the edge of the grid. Don't click it, it's a waste of time. There are other combinations, just look carefully, you will soon begin to see them.

Complex Winon paths

- The following grid shows how complex a Winon path can get. Be aware of these complex interactions when trying to find and tag atoms.



Related Topics

- ◆ [Playing Atoms](#)
- ◆ [Rules of the Game](#)

Menu Commands

This section describes the menu commands available in Atoms.

Game Menu

New

Starts a new game at the current level. If a game is in progress, it is lost.

Give Up

Ends current game. If Show Rays is checked in Setup menu, atom locations and Winon traces will be drawn on the game board. If a game is in progress, it is lost.

Easy

Sets the difficulty level to easy. 10 by 10 grid with 6 atoms.

Intermediate

Sets the difficulty level to intermediate. 10 by 10 grid with 8 atoms.

Hard

Sets the difficulty level to hard. 16 by 16 grid with 10 atoms.

Impossible

Sets the difficulty level to impossible. 16 by 16 grid with 14 atoms.

Best Times

Displays the best times for all four levels.

Exit

Quits atoms. Not the best menu item...

Setup Menu

Grid Size

Opens dialog box to allow the grid size to be changed.

Show Rays

Toggle used to select whether atom location and Winon traces are to be drawn at end of game.

Help Menu

Help

Opens on-line help.

About

Opens about dialog box.

Registering Atoms

Please give Atoms a try. If you do find Atoms fun and a good way to spend some time, please register it by sending \$5.00 to the author. You can print the REGISTER.FRM file or register on-line in CompuServe, in the SWREG forum. To register using CompuServe, follow the directions below. Also, I would really like to hear some comments from those who try and play Atoms. Tell me what you think. You can use mail or email my CompuServe account: 76260,306. Thanks, and enjoy!

The author's address (should you desire to send the registration fee or make suggestions):

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CompuServe Registration

To register using CompuServe, type GO SWREG at the ! prompt. Atoms is listed in the shareware registration database as ID #1528. The registration fee of \$5 will be charge to your CompuServe account.

Disclaimer

This program is distributed as-is. The author accepts no responsibility for any time/work/data lost while playing this game. Have fun!!

Revision Log

Version 1.0	Initial Release
Version 1.0A	Updated some of the documentation.
Version 1.1	Updated screen redraw when changing board sizes and fixed window size problem that caused session window to be too tall.
Version 2.0	Added dialog box to change Grid Size, Give Up function, and ability to draw Winon rays and atom locations at game end.
Version 2.1	Fixed problem with display of Atoms indicators when right mouse button clicked to show Atoms.

Configuring Atoms

There are only two user configurable functions available in atoms. The size of the playing grid and whether Atoms and traces are drawn.

Grid Size

The grid size affects the size of the entire game window. If the Atoms game window is too large or small for your tastes or display, the grid size can be modified. This may be necessary if you are running Windows at a lower screen resolution such as 640x480. Atoms defaults to a grid size of 20. Valid choices are: 16, 20, 24, and 28. Use the Grid Size dialog box from the Setup menu to change the grid size. It is no longer necessary to edit the ATOMS.INI file as in older versions of Atoms.

Show Rays

After a game ends, Atoms has a function to show the locations of all atoms and draw the traces the Winons make for all buttons. To activate this function, select the Show Rays menu item in the Setup menu so that there is a check mark by it. If there is already a check mark, the function can be disabled by selecting it again.

ATOMS.INI File

It is not necessary to edit the ATOMS.INI file to configure Atoms. All user configurable functions in Atoms are available from the menus. For curiosities sake, the entries will be explained. The Grid=X line saves the current grid size. The Game=X line is used to keep track of the difficulty level when exiting so that Atoms will restart at that same level. The Rays=X line saves whether atoms and traces should be drawn at the end of a game. The lines in the SCORES section are to keep track of the best times and names of those who got them.
