System Requirements

Virtual Pool requires an IBM/Tandy 100% Compatible running Windows 95 and a 486/66 or faster microprocessor with 8 MB of RAM.   You must have 8 MB of free hard disk space and a CD-ROM drive.   Recommended: Pentium or faster microprocessor with 16MB of RAM, double speed CD-ROM, local bus or PCI video card with 1MB of video RAM, and sound card.

Note: Virtual Pool must have a 256 color palette to run.   If you have more colors than this selected, Virtual Pool will only run in full screen mode and will change to 256 colors while it is active.   If you wish to run Virtual Pool in a desktop window, change the Color Palette setting to 256 colors (this can be found by opening the Control Panel from within the Settings option in your Start menu.   Within your Control Panel select the Display icon and choose the Settings tab in the Display window.   The Color Palette option will be at the bottom left of the resulting window.

How to SETUP Virtual Pool

 Put the Virtual Pool disc into your CD-ROM drive.   If AutoRun is enabled the setup program will automatically start. If setup does not auto-start, select Run from your Start menu and Browse for or type **d:\WINDOWS\SETUP.EXE** (where d: is the letter of your CD-ROM drive).   Setup will lead you through the process that will install Virtual Pool on your hard drive and create the Virtual Pool game icon and Program Group.

After Virtual Pool is installed, the setup program will check to see if you have DirectX 3 or later installed on your system.   If you do not, you will be asked if you wish to Install it. Select yes to install.

After both Virtual Pool and DirectX 3 are installed on your system, Virtual Pool will automatically start up.   Please take some time and fill out the Electronic Registration form.   A few minutes of your time will get you access to free Interplay Demos, product updates, discounts on products, and more.

Starting the Game

Place the Virtual Pool disc into your CD-ROM drive.   The Autorun feature will start Virtual Pool if it is installed on your system or bring up the Virtual Pool install program. If you have your Color Palette set to 256 colors, you can play either full screen or in a scaleable desktop window.   If you are using more colors, Virtual Pool can only be run full screen.

Getting a Quick Start

 After some introductory screens, the Virtual Pool game screen will come up. The game screen consists of your Menu Items, Status Area, Pool Window, and Action Bar. These areas will keep track of everything in the game for you.   See Game Window below.

By default the game starts a two player game of Nine-Ball with Player One in Aim Mode. By moving your mouse left or right you can adjust the Aim.   Moving the mouse forward or back tilts the view of the table.   Hold down the left mouse button while moving the mouse forward or back to increase or decrease the Zoom level.

When you are satisfied with your aim, press and hold the S key.   Your mouse is now connected to the cue stick.   As you move the mouse back and then forward, the cue stick will move in response.   Move the mouse forward slowly for a light tap and quickly for a more powerful shot.

Press ESC to bring the mouse cursor back onto the screen at any time and bring up the Menu Items if they are hidden.   You can find a complete description of the game controls in this manual. See Keyboard Controls for a description of the keyboard interface and hot keys and Menu Items for a description of the menu bar and menus.

A quick reference card, which stays visible as you play (Desktop Mode), can be accessed here: Quick Reference

The Game Screen

The game screen is broken into 4 basic areas: the Menu Items at the top of the screen (these are hidden when playing full-screen), the Game Status area at the top of the screen, the Game Window in the middle of the screen, and the Action Bar which goes across the bottom of the screen.
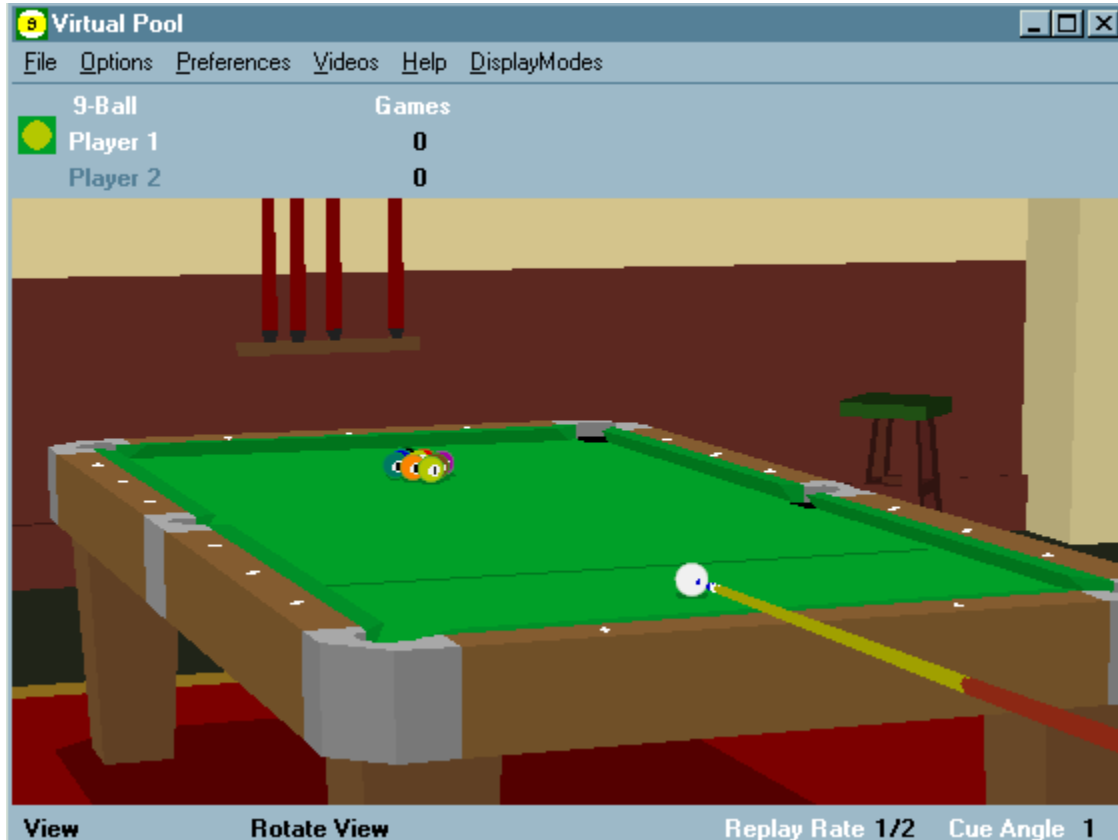
The Game Status keeps the player names and status of the current match.   The scores that are kept for each type of pool game vary, but in general, there will be a column for score and a column for the number of games won.   During some games an icon of the ball you are supposed to be hitting will appear next to the player name.   For example, when playing 9-ball, an icon for the lowest ball on the table will appear next to your player name when you are shooting.   Any fouls that are committed are also displayed prominently at the right side of this area.

The playing area is devoted to your "virtual" pool table.   You can play the game from any angle you like,   using Virtual Pool's unique 3D world to line up your shots just like you would in read life.   Check out Keyboard Controls   for information on how to move around the table, take shots, and more.

The Action Bar at the bottom of the screen displays information about the current shot and shot mode.   The left side of the bar will show the current mode the player is in.   For example, if you are getting ready to shoot the ball and are holding S on the keyboard, this will display 'Shoot Mode'.   A brief description of your options while in this mode is displayed just to the right of this.   If you are in shoot mode as described above, this will display "Stroke Cue", which lets you know that moving the mouse at this point will stroke the cue.   The Cue Angle and Replay Rate are displayed on the right of this menu.

Menu Items

All of the available game options and settings can be easily customized and changed using the pull-down menus at the top of the screen.   While you are playing, your mouse is actively controlling the cue stick and your shot, so to enter the menu system you must first press ESC to make the menus and your cursor active.

Listed here are all of the menu headers and the options available under each:

File Menu
Options Menu
Preferences Menu
Videos Menu
Help Menu
Display Modes Menu

File Menu

New Game

This will bring up the New Game Setup menu which contains several options for your next game.

The **Opponent** section lets you choose your opponent from one of the following options:

Another Player	play another player on the same computer.
Remote Player-	play another player on another system via network, modem, or serial cable.
Computer	Player-play a computer opponent.
None/Practice or Trick Shots	play by yourself with no opponent

The **Game** section allows you to choose from any of the four types of pool offered in Virtual Pool:

Straight Pool
Eight Ball
Nine Ball
Rotation

The final two options in the **Goals** portion of this menu allow you to customize the scoring for your match.   You can change the number of games to play in each match or change the points goal for Straight Pool.
When you are ready to start, click on Rack New Game.

Load Game (alt-L)

This option will allow you to load your saved games or any of the trick shots that came on the Virtual Pool CD.   Just select the position you wish to load and click on Load Game.
Trick shots are stored as *game_name*.pt files and games as *trick_name*.p files.

Save Game (alt-S)

This will allow you to save the current game in the exact state it is currently in.
You don't need to specify a file extension, it will be added as *name*.pt if your in practice mode, or *name*.p if in any other game mode .

Load Scene

Loads alternate background scene files.

Video Statistics

Show video statistics. These can help you select the best resolution to run Virtual Pool in.
The statistics shown are:
- Video Mode - either Desktop Window or Full Screen
- Resolution - shows current resolution for Full Screen mode or size of window for Desktop Window mode
- Buffering - single, double, or triple
- Buffer Memory - system or video
- Frame Rate - frame rate of last shot

Your frame rate should be at least 20 frames per second.

When running in Desktop Window mode, the only statistic that affects performance is Buffer Memory. It is preferable to use video memory. If your using system memory it's because your video card does not have sufficient memory.

When running in Full Screen Mode, the Buffering and Buffer Memory statistic affect performance. The larger the Buffering number the better, IE triple is better than double. If the Buffer Memory statistic is system memory, there is a huge performance loss. Try lowering your resolution until the Buffer Memory is video memory.

Demo
Selecting this option will send the game into a demo mode in which two computer opponents will play against each other at 9-Ball.

Exit
Closes the program and returns you to your desktop.

Options Menu

Quit Match (alt-Q)

Quit Match ends the current match, resetting the number of games won and the amount of fouls to zero.   Both player names remain in the status area, and a new rack of the previous game is set up.

Change Turn (alt-T)

To change the shooting player, select this option.   This option can be used to allow players to play variations of rules such as a Push-Out rule for nine ball.

Kibitz (alt-K)

This option will have the computer automatically turn on tracking lines and set up your best shot.

Miscall (alt-M)

Virtual Pool uses the honor system for calling shots.   If you pocket the wrong ball or a ball in the wrong pocket, you can declare a Miscall by selecting this option.

End Game in Draw (alt-D)

Selecting this option ends the current game in a draw, re-racks the current game, and starts a new game.

Resign Game (alt-R)

By selecting this option, the current player forfeits the game and their opponent is assigned a win.   The balls are re-racked for the next game.

Change Player Names

This option will allow you to type in new names for human players in the game.

Spot/Remove Balls (Ins, Del)

This option will allow you to remove balls from the table or place balls that are off the table back on.   Balls that are currently on the table have a check in their checkbox.   To remove them, simply click on the checkbox, and the ball will be removed from the table. When spotting a ball, the ball will appear at the top of the rack.

Preferences Menu

The preferences menu allows you to change various options in the game to better suit your style of play.

Game This submenu contains the following options:

Graphics
Display Background   (On, Off)
This will toggle the Virtual Pool room on and off.   If you are having performance problems or just want to concentrate on the table more, try turning off the background.

Auto Line Up
Aim to Next Ball   (On, Off)
This option will point your cue in the direction of the next ball if you are playing a game such as nine ball where the rules dictate which ball must be hit.   This will only point you in the general direction however, don't expect Virtual Pool to do the aiming for you!

Restore Distance   (On, Off)
If you have Restore Distance on, the beginning of every shot will be the same default distance from the table.   With this option off, the camera stays at the distance it was at the end of the last shot.   This option is for players who like to use the zoom option often.   If you do zoom a lot, you may find the turning Restore Distance off may save you some time.

Sound
Game Effects   (On, Off)
This allows you to turn on/off sound effects.

CD Music Auto Start   (On, Off)
When checked, starts CD music upon game startup.

Mouse Sensitivity   (On, Off)
If you want your mouse movements to be more exaggerated, or perhaps a bit less drastic, change the sensitivity of the mouse with this option.

Status Font will bring up a dialog allowing you to dictate the font, style, and size for the status area.

Chat Font will bring up a dialog allowing you to dictate the font, style, and size for the status area.

CD Control shows the Music CD Control panel.

Videos Menu

The video menu will give you access to the extensive library of   tutorial and trick shot movies that are included with Virtual Pool.   Available options are:

        History of Pool

        Pool Techniques

                Meet Machine Gun Lou

                Aiming

                Center Ball Hit

                High Cue Ball Hit (Follow)

                Low Cue Ball Hit (Draw)

                Using Follow and Draw

                Side Cue Ball Hit (English)

                Combination Shots

                Kiss Shots

                Carom Shots

                Using Ball Throw

                Bank Shots

        Trick Shots

                1 and 3 Ball Shots

                2, 4, and 6 Ball Shots

                Shots using 15 Balls

                Position Shots

                Ball Clearance Shots

                Stroke Shots

                Escape Shots

                Masse' Shots

                Miscellaneous Shots

Help Menu

The help menu gives you access to online help and information about Virtual Pool for Windows 95.

Help Topics brings up the Help Finder which contains a table of contents, index, and finder for the Virtual Pool Manual.

About displays information about Virtual Pool for Windows 95.

Display Modes Menu

This pull-down menu will let you choose from a number of resolutions from which to play the game.

Desktop Window   To play Virtual Pool in a desktop window, the Color Palette must be set to 256 colors.   If this is changed (under Settings in the Display portion of your Control Panel), you will be able to play Virtual Pool in a scaleable desktop window.

The other available resolutions for full-screen play are dependent on your video card configuration. Selecting different resolutions can have a significant effect on performance. You can check your performance statistics using the Video Statistics selection on the File Menu.

Keyboard Controls

Keyboard controls are used in conjunction with the mouse to interact with the Virtual Pool environment.   Control keys are used in conjunction with the mouse or affect mouse operation. Action keys perform frequently used game control functions. Option keys activate game options (also accessible via options menu) and activate chat.

Here are a list of keys by category.

Control Keys

Action Keys

Option Keys

Control Keys

A: Aim

Move the mouse left or right to aim the cue.   Move the mouse forward or back to change the up/down angle of the table.   Hold the left mouse button and move the mouse back to zoom in.   Hold the left mouse button and move the mouse forward to zoom out.   The view stays centered around the ball.   The Status Area will inform you when you are in Aim Mode.

S: Shoot

Hold the S key down and move the mouse back for your backstroke, and then forward to strike the cue ball.   The faster you move the mouse forward, the harder you will strike the cue ball.   As with a real pool cue, a smooth stroke is very important.   The Status Area will inform you when you are in Shoot Mode.

V: Change View

Press V to select View Mode.   Move the mouse left and right to rotate the table.   Moving the mouse forward and back changes the up/down angle of the table.   Hold the left mouse button and move the mouse forward/back to Zoom the view.   Hold the V key down and move the mouse to change the center of view.   The center of view is the point the view rotates about.   Changing to Aim mode will bring the view back to the cue ball (Aim) view.

M: Select and move ball

Hold the M key down to move the currently selected ball.   Hold the H key down to change the ball selection.   "Move" will only work on the cue ball when you have ball-in-hand during a game, or while in practice mode.   H only works in practice mode.

B: Raise butt of cue

For some advanced shots, such as the masse, you must hit the cue ball from above.   Hold down the B key and move the mouse forward or back to bring the butt of the cue up or down.   The Status Area will display the cue angle, which will be reset to normal after the shot.

C: Move Center Point

Hold C and move the mouse to move the center point of the view to a different location on the screen.   Moving the view in this way does not affect the aim of the shot.

E: English: Move cue tip

Hold E and move the mouse to apply English (change the cue tip location on the cue ball).   The dot on the cue ball indicates where the cue tip will hit.   English is used to place spin on the cue ball, and can be very helpful in making what would otherwise be impossible shots.   Hitting the cue ball to the left or right of center places a left or right spin on the ball.   Hitting the cue ball above center puts a forward or backwards spin on the cue ball.

F: Vary Force of Tracking hit

This option is only available if (T)racking is turned on.   While Tracking is on, hold F down and move the mouse forward or back to change the force of the hit.   Tracking Lines get longer as the mouse is pushed forward (Increase Force) and shorter as the mouse is pulled back (Decrease Force).   Use the SPACE BAR to use exactly this amount of force.

H: Select a different ball to move

You must first select M to first activate Move; then hold the H key and move the green cross-hair cursor with the mouse over the ball you wish selected.   When you release the H key the cursor will snap to the nearest ball.   Once the ball is selected, hold the M key to move the ball to the desired location.   Again, this option is only available in Practice Mode.

Left Mouse Button: Zoom

Hold the left mouse button down and move the mouse backwards (down) to zoom in, move the mouse forward (up) to zoom out.

Shift: toggle Amplify

Press the shift key (no need to hold it) to toggle Amplify. "Amplify" will appear in red in the status area.   Mouse movements are exaggerated while Amplify is turned on.   This option is used primarily for the break.

Ctrl: toggle Fine Tune

Press the Ctrl key (no need to hold it) to toggle Fine Tune.   "Fine Tune" will appear in red in the status area.   Mouse movements are much finer while Fine Tune is turned on.   Use this control for setting up trick shots or anytime precision alignment is needed.   It also comes in handy for hitting the cue ball softly for those delicate trick shots.

Action Keys

L: Toggle table lines
Press the L key to toggle the table lines on or off.

O: Overhead View
Changes to View Mode and shows a direct overhead view.

R: Replay last shot
Press R to replay the previous shot.   You can change the rate of replay (even during replay) with the plus and minus keys.   Replay is not available for remote play.

T: Toggle Tracking
The T key will toggle the Tracking Lines on and off.   Tracking shows you the path of every ball on the table, based on the current aim and force setting.   Each ball's path is indicated by a line of the same color as the ball - IE. Striped balls have striped paths and so on.   The Tracking lines end where the ball will stop.   The exact path balls will follow is based partly on the force of the hit.   To hit the cue ball with exactly the force shown by Tracking, press S and then press the space bar instead of shooting the ball with the mouse.   Toggle Tracking does not work during remote play, computer play, or Shark Skins.

U: Undo
Press U to Undo the last shot.   The view will reset to the Aim and table position of the previous shot.   This is very useful for practicing shots.   Undo is not available when playing a computer opponent, or when connected to a remote player via a network or modem.

X: Examine Table
Snaps to an overhead view of the table while X is held down.

Z: Zip to result
Press Z after you shoot to progress immediately to the end of the shot.   Z will skip to the result of the shot, placing the balls where they would have ended up if allowed to roll naturally to a stop.   Zip is not available on remote play.

+/=: Increase replay rate
The + key (or the = key) will step up the replay rate to 1/8 speed, ¼ speed, ½ speed, or 1 (full) speed.   The replay rate is shown at the top right of the status area and can be adjusted at any time, even during a replay.

-:   Decrease replay rate
The minus key will slow down the replay rate - your choices are 1/8 speed, ¼ speed, ½ speed, or 1 (full) speed.   Again, the replay rate is shown at the top right of the status area and can be adjusted at any time.

ESC or F10: Opens Main Menu System
Press the ESC key to enter the Main Menu.   You may also access the Main Menu by pressing the F10 key.

Option Keys

/ : Send communication to remote player
Press the / key and you will be able to send a text message to a remote player. Pressing Enter when you are done enters your message, and it will be sent to the remote player.

Alt-G: Return to Game
Alt-G only works during a trick shot that was loaded during a trick shot video. It returns to the game in progress.

Alt-K: Kibitz Shot
The computer will recommend a shot using tracking. This feature only works in Another Player mode.

Alt-L: Load Saved Game or Saved Position
Use this command to load a previously saved game.   In practice mode, this will load a menu of saved trick shots.

Alt-M: Declare miscall on previous shot
Most games require players to call their shots.   The shot you are attempting is obvious to you, of course, but if a shot doesn't go in as you planned, how is the computer supposed to know?   It can't read your mind, so in Virtual Pool you're on the honor system to admit your mistakes.   Press Alt-M and play will proceed to the next player.   Not available in Practice Mode or during Remote Play.

Alt-P: Pocket Selected Ball
Pressing Alt-P will pocket the currently selected ball.   This option only works while in Move Mode, Practice or Trick Shot mode.

Alt-Q: Quit current match
Alt-Q quits the current match - don't worry if you hit it by accident, you will be asked to confirm this option.   Game and Foul totals will reset to zero for both players.   Quit current match is not available with remote play.

Alt-S: Save game or position
Alt-S saves the current game.   You can use this to save a game to resume later, or you can use it to save trick shots.   You must enter a name to save the shot under.

Alt-T: Change player turn
If you want to play "push out" rules, let your opponent try again, or just got mixed up as to whose turn it was, press Alt-T and play will go to the other player without the movement of any balls or the assessment of any fouls.   Change player turn is not available with remote play.

Alt-V: Return to Video
Alt-V only works during a trick shot that was loaded during a trick shot video. It returns to the video.

INS: Spot selected ball

Brings up the Spot/Pocket Ball Menu.   The Spot/Pocket function only works during practice mode. In other modes this menus shows which balls have been pocketed.

Practice Mode

To practice pool or set up trick shots, select Practice/Trick Shots.   You will have no opponent while practicing.

You can add or place the cue ball wherever you want by pressing and holding the M key and then moving the mouse.   While in Move Mode, a green 3-D cursor will appear above the selected ball.   To select a different ball to move, press and hold the H key down, move the cursor (using the mouse) over the ball you want to move, then release the H key.   The cursor will lock to the nearest ball, which you can then move by holding the M key and moving the mouse.

You can add or remove balls from the table by pressing the Insert key to open the Spot/Pocket Balls window, and then clicking on the balls you wish to spot or pocket.

To re-rack the balls and start over again, select Game Options from the Program Control Menu, then select the rack for the game you want to practice.

Note:

Trick shots can be loaded or saved by using *"Load Position" (Alt-L*) *or* *"Save Position" (Alt-S)* *.   You must be in Practice Mode to load and save shots.*

Tracking and Force

Have you ever wished that you could tell exactly what those ricocheting balls are going to do before you take the shot and test your luck?   In Virtual Pool you can do just that. Tracking lets you see the projected paths of the balls, depending on how you're about to strike them.   Press T to turn Tracking on - colored lines will appear, showing where the balls will roll.   The colors of the lines correspond to the colors of the balls; logically, solid-colored balls have solid lines and striped balls have dashed lines.   As you move the mouse to adjust the aim, the tracking lines will shift in response.   Just like in real pool, how hard you hit the balls makes a difference as to where they'll end up.   You can change the force setting by holding down the F key and either moving the mouse forward to increase force or back to decrease force.

While Tracking is on, you can take the shot with the exact amount of force shown by pressing the S key to activate Shoot Mode and then pressing the space bar.   If you shoot the shot yourself, the balls may not follow the same paths because the force may be different.   Moving the cue tip on the cue ball or changing the cue angle also affects the tracking lines.   Tracking is not available during remote or computer opponent play.

Scoring

Scoring is handled differently depending on the particular game that is being played:

In 8-Ball, the winner of a game is whoever sinks the black 8-ball.   However, you must sink all of the solid balls (1-7) or all of the striped balls (9-15) first.   Fouling on the 8-Ball or prematurely sinking the 8-ball loses the game.

In 9-Ball, the winner is the person who sinks the 9-Ball.   The lowest ball on the table must be hit first.

In Rotation Pool, the object is to reach 61 points.   When you sink a ball, you receive that ball's number as points.   As in 9-Ball, the lowest numbered ball must be hit first.

In Straight Pool, the object is to reach a pre-determined number of points.   Each ball pocketed scores one point.   Fouls subtract points from your score.   See the Straight Pool rules for details on penalties.

Computer Opponents

You can play Virtual Pool against a variety of different computer opponents, each with his or her own skill level and style of play.   The computer opponents are (in ascending order of skill):

Mrs. Offen
Eiza Crost
Troy Zinvane
Wild Ball Hickok
Cautious Clay
Buster Cluster
Bram Stroker
Rail McCoy
Dead-Eye Dan

To play against a computer opponent, select Game Setup from the Program Control Menu, and then click on Computer Player from the opponent section of the menu.   The list of players is arranged in ascending order of skill.   Computer players toward the beginning of the list make good opponents for the average player; those near the end of the list will provide a challenging game for the most seasoned professionals.

The Table

The table in Virtual Pool is proportioned like a standard 4 ½ x 9ft. tournament table. There are pockets in each of the four corners and halfway down both of the longer sides. There are three diamonds between every pair of pockets.   The head string goes across the table at the second diamond   from the head of the table.   The foot spot is where the front ball is placed when the balls are racked.

General Pool Rules

For a legal shot, the cue ball must hit a ball and then either a) the cue ball must hit a rail, b) an object ball must hit a rail, or c) an object ball must be pocketed.   If none of the above conditions are met, the shot is a scratch, or foul.   The penalty for a foul is ball-in-hand for the opponent.   A turn ends when the player fails to pocket a ball or fouls.

All games are played with the above rules in addition to specific rules for each game.
9-Ball Rules
8-Ball Rules
Straight Pool Rules
Rotation Rules

9-Ball Rules

Nine balls numbered one through nine are racked in a diamond shape with the 1-ball at the front and 9-ball in the center.   The lowest numbered ball must be hit first.   Failure to do so results in ball-in-hand for the opponent.   The 9-ball can be pocketed at any time as long as the lowest numbered ball is hit first.   An illegally-pocketed 9-ball is spotted; others stay down.

8-Ball Rules

The object of 8-Ball is to either a) pocket all seven stripes or all seven solids then pocket the 8-Ball, or b) to pocket the 8-Ball on the break without scratching.   A foul on break results in ball-in-hand behind the head string.   Other fouls result in ball-in-hand anywhere on table.   The first player to pocket a ball gets "ownership" of that color for the rest of the game, be it stripes or solids.   After ownership is determined, you must be careful that the cue ball always hits one of your own balls first.   When you're going for the 8-Ball, the cue ball must hit the 8-Ball first.   Pocketing the 8-Ball prematurely loses.   Fouling on the 8-Ball loses.   Players must call 8-Ball. Miscall on 8-Ball loses.

Straight Pool Rules

The object is to reach a point score determined at the beginning of the match.   Any legally pocketed ball is worth one point.   Balls pocketed in addition to the called ball also count for one point.   A turn goes until the shooting player misses, commits a foul, or wins the game.   A foul on the break is -2 points.   Any foul after the break is -1 point.   Three consecutive fouls results in a loss of 15 points.   A foul results in ball-in-hand behind the head string.   On the break, the cue ball and two other balls must hit a rail.   Players must call a ball and a pocket, but other than that there are no restrictions on the type of shot taken.   Fifteen balls are racked the first time.   When only one ball remains, the other fourteen are racked.   The balls are racked with a space for the fifteenth ball on the spot. If the fifteenth ball interferes with the racking of the other fourteen, it is placed at the foot spot.   If the cue ball interferes with the rack, then the shooter has ball-in-hand in the kitchen.

Rotation Rules

The object of the game is to be the first player to reach 61 points.   The cue ball must hit the lowest-numbered ball first.   Legally pocketed balls count as their numbered value - there are 120 points available on the table.   A foul results in ball-in-hand anywhere on table.   Illegally pocketed balls are also spotted.

Pool Strategy

Once you've reached an acceptable skill level for cue ball control you can turn your attention to the art of strategy.   Remember that Virtual Pool allows you to play four popular games of Pool.   Straight, 8-Ball, 9-Ball, and Rotation.   Familiarity with the rules will influence your capabilities, so review your choice in the Pool Rules section.   There you'll find easy instructions and basic strategies.

Here's some tips on strategy relating to various games.

9-Ball Strategy

8-Ball Strategy

Straight Pool Strategy

Rotation Strategy

9-Ball Strategy

For beginning players who can't run out:
- Blast the Cash. Get the nine ball moving.
- Don't try to run the balls left on the table unless you have at least a 25% chance of succeeding.

For better players who can run out:
- Nine Ball for better players is about table control. Run out or play safe. If you give your opponent a good shot he'll probably run out the rack and maybe a few more.

8-Ball Strategy

For beginning players who can't run out:
- Try to make all easy shots available on the table first.
- If you don't have any shots you can blast, but don't get the eight ball moving.

For better players who can run out:
- Don't try to run out unless you think you can. Removing most of your balls gives your opponent an easy run out.
- Move balls around and try to improve the table for you and make it worse for your opponent. When you think you can run out, go for it.
- If playing safe is legal (to many players this is taboo in eight ball), then it's OK to pocket some balls then play a nasty safety.

Straight Pool Strategy

For beginners who can only run a few balls:

- Make easy balls first.
- Shoot short shots and don't try anything fancy unless you have too.
- You're going to miss but that's OK; your opponent can't run more than a few either, or you're playing the wrong guy.

For better players who can run a rack or more:

- Clear balls up table as soon as possible.
- Try to leave alternate balls to shoot in case you get out of line.
- Look for natural opportunities to break up clusters.
- You don't need to slam the cue ball into clusters to split them up.
- Don't bump balls unless you have to, you may make clusters.
- Play safe if you don't have a good shot.

Rotation Strategy

For beginners:

- Blasting balls is a good strategy. Get the big points moving.

For better players who can run at least 4 balls:

- Play for the big points early. Making lots of low numbered balls doesn't get you many points and there's usually too much trouble to run out.
- As the game progresses, play more conservatively. If you give your opponent an opportunity with big balls on the table you've lost.
- Keep track of the score. Figure score into your decision to go for it or play safe.

Introduction to Pool Fundamentals

This section describes pool fundamentals that apply to both Virtual Pool and Pool in general.   Studying this section will improve both your real and virtual games.   One major advantage you have in Virtual Pool is a perfect pool stroke.   Your cue stick is guaranteed to stroke straight and put spin on the cue ball just like a championship-caliber player.   To play well, edge and hone your speed control.

There are tips for using Virtual Pool in this manual. Click on the tip Icon below for your first tip.

Cue Tip Position
Aiming Shots
Bank Shot
Cue Ball Path
Draw and Follow
English
Combinations
Carom
Kiss

Cue Tip Position

Virtual Pool allows you to change the position of the cue tip on the ball - and therefore the path of the ball - just like in the real game.   Altering the position of the cue tip with the E key will alter the path that the balls take.

The diagram below shows terminology for cue tip positions on the side of the cue ball.
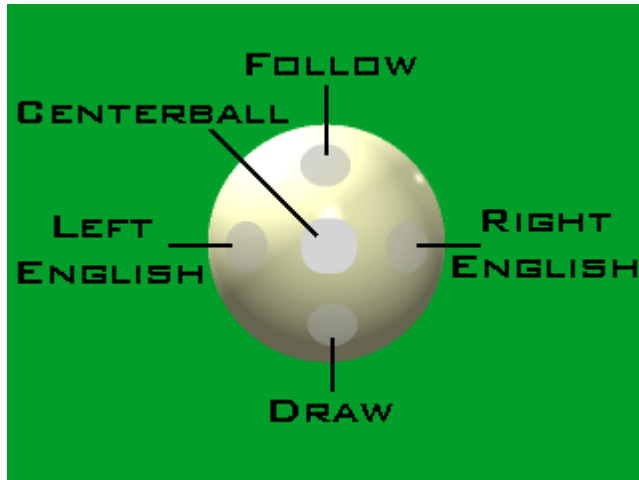
Combinations of these are expressed as high right (follow and right) English or low left (draw and left) English.   Distances from center of cue are usually expressed in cue tips as in: "follow with half a cue tip of right."   Virtual Pool allows you to be very precise with cue tip placement.

You might want to start out using center-ball hits only.   Then, when you feel confident enough with the game controls to add a little more flair to your shots, practice using follow and draw to change cue ball paths.   Follow and draw have the most effect on shots with less cut angles.   English has its greatest effect on the cue ball's path when the ball ricochets off of a rail.

Aiming Shots

Practice aiming shots initially using center ball hits.   The diagram below shows the place the cue ball must be when it contacts the object ball to sink the ball in the corner pocket.
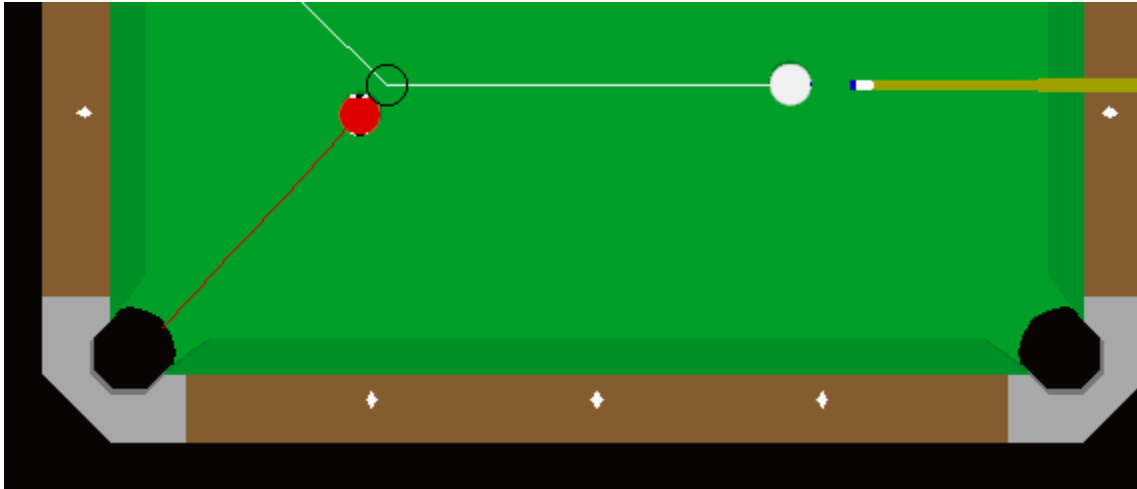
One technique of aiming is to imagine a ball in this position and try to hit the imaginary ball full-on.

Bank Shot

If you can hit the object ball with the cue ball and bounce the object ball off one or more rails then into a pocket, you've just pulled off a bank shot.   The basic technique for aiming bank shots is to first assume that the ball will rebound at the same angle that it hits the cushion.   This can be used to estimate the angle; however, you must be aware of the effect that the ball speed has on rails.   It is a common misconception that a ball will always bounce off the rail at exactly the same angle at which it hits the rail.   This is close but not quite true.   The exact angle that a ball will bounce off of a rail is based on a combination of the angle the ball hits the rail, the speed at which the ball is moving, and the amount and type of spin you've put on the ball.

Shown below is a shot hit center ball with a slow speed stroke:
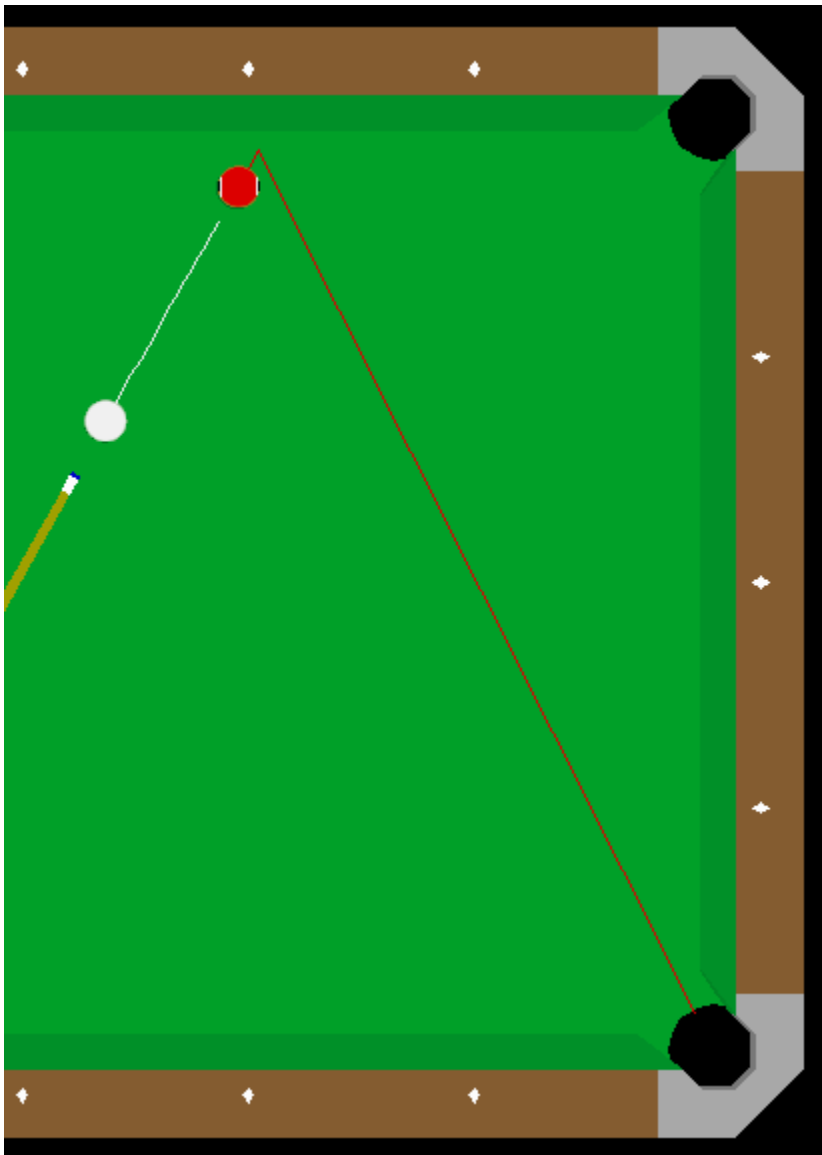
The same shot hit with center ball and a faster stroke banks short of the pocket:
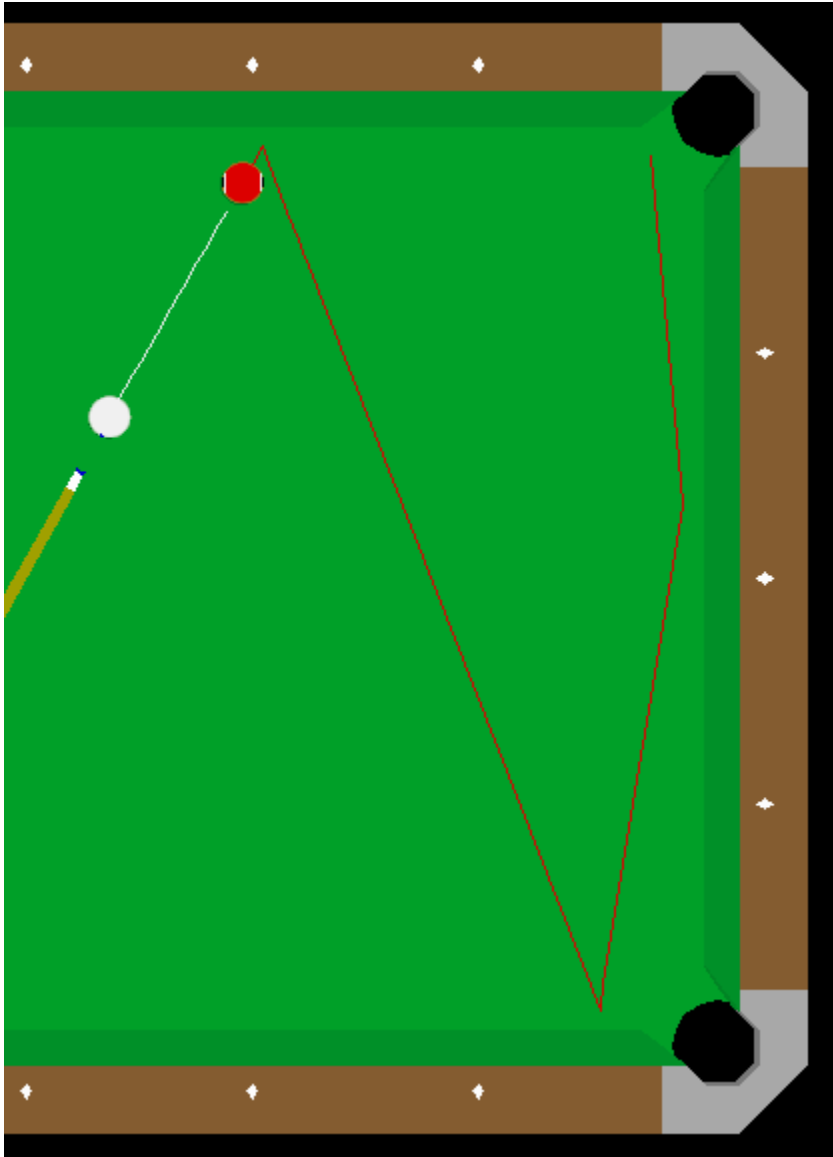
The angle of bank will shorten as ball speed increases.

Cue Ball Path

The cue ball always starts on a path perpendicular to your cue aim.   It will then curve forward or backward as the spin on the ball changes.   Shown below is a center ball hit which curves forward and goes into the corner pocket.
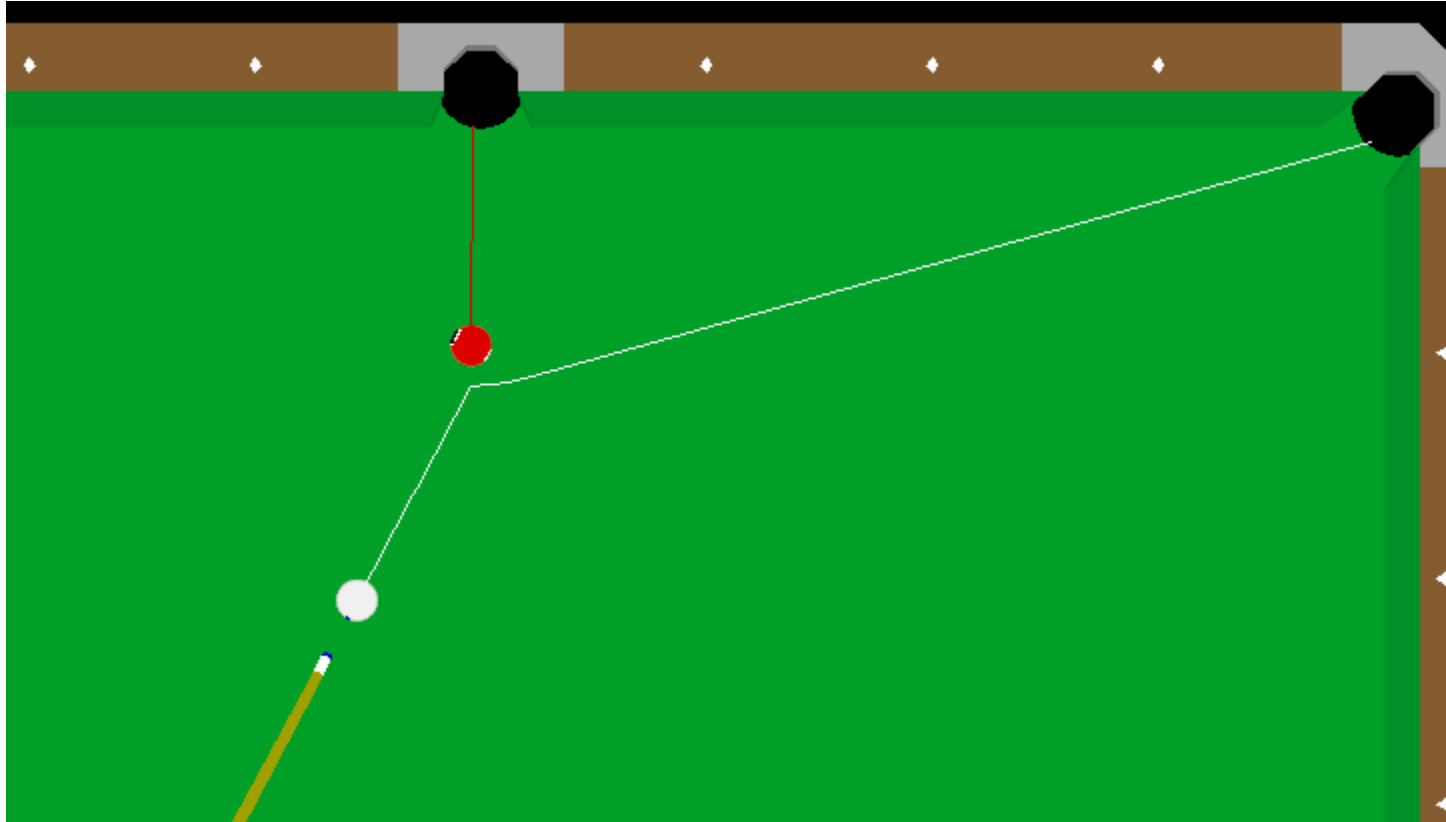
If this ball was hit harder, it would stay straight longer and hit the end rail further from the pocket.
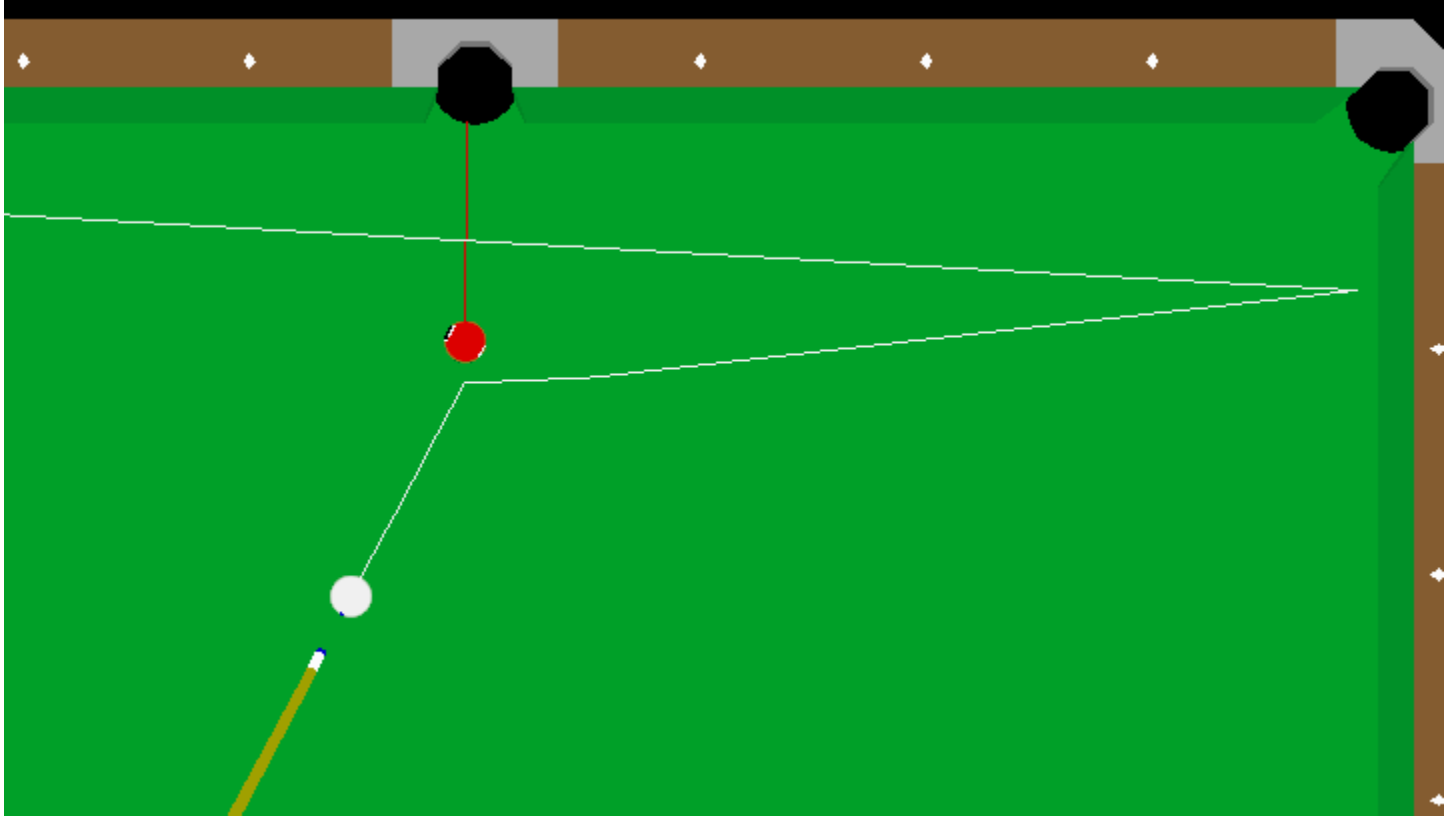
Knowing which path the cue ball takes with center ball hits is the first step to learning how to control the cue ball.
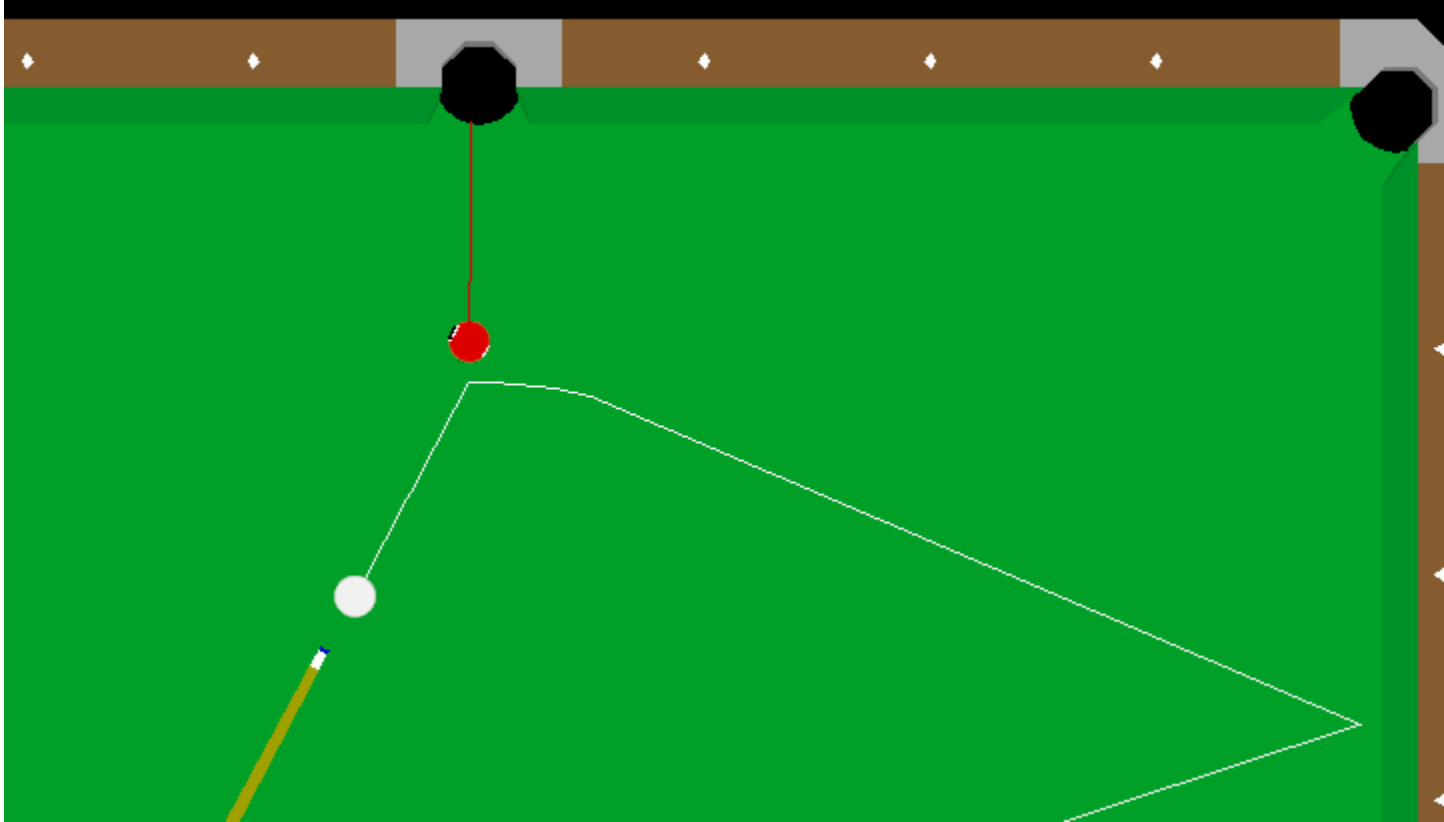
Draw and Follow

For straight-in shots, "drawing" the cue ball by hitting it below-center will bring the cue ball back towards you.   "Follow," which is applied by hitting the cue ball above-center, will move the cue ball forward, away from you.   The farther away from center you hit the cue ball, the more spin will be applied given the same stroke speed is used. The actual spin is determined by cue offset from center and stroke speed. You'll need to practice your stroke speed to get consistent results.

With shots at an angle, draw and follow affect how the cue ball curves off of the perpendicular line.   Follow causes the cue ball to curve forward more and move forward from the line quicker:
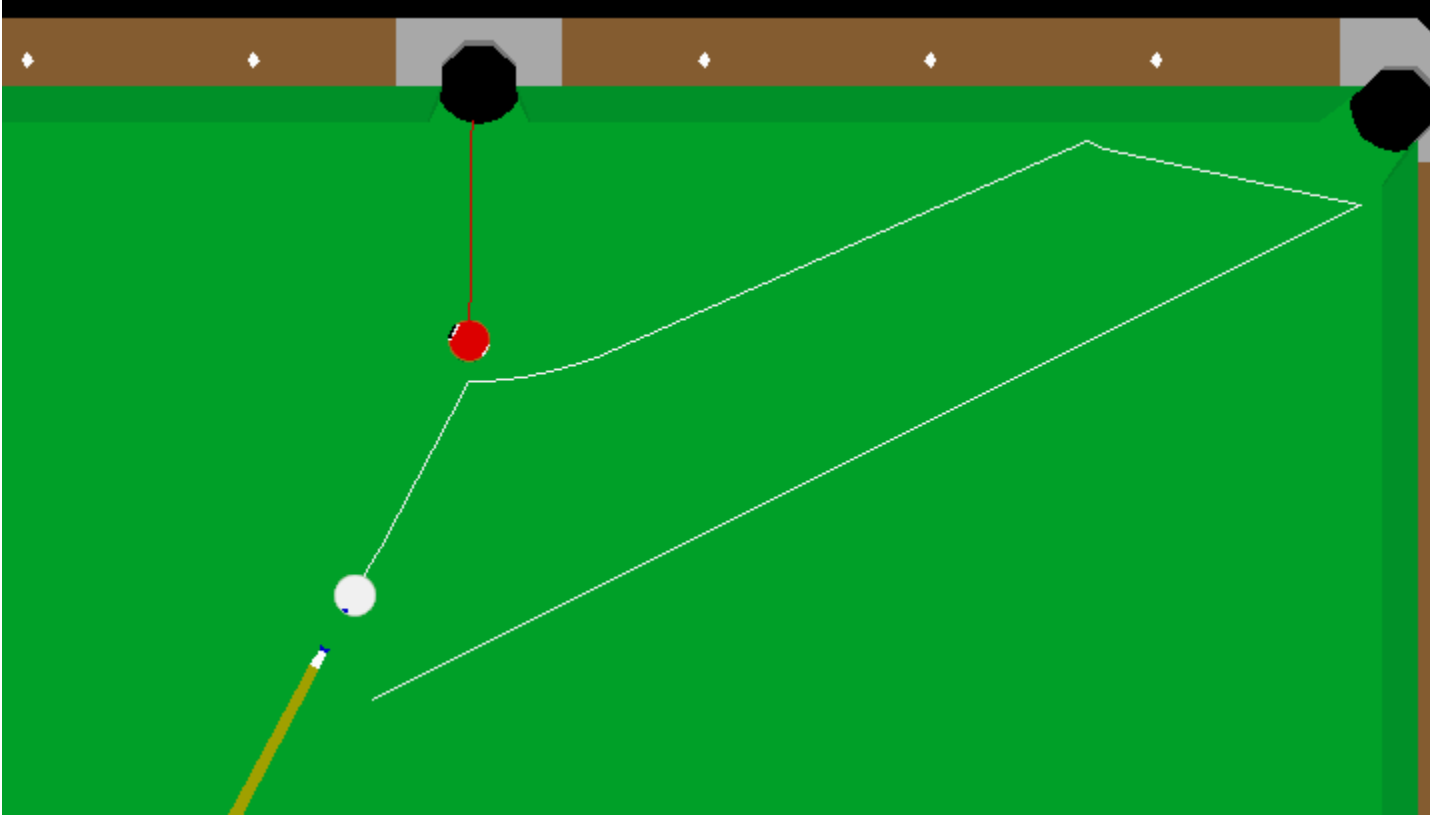
Draw causes the cue ball to curve back from the perpendicular line:

As the angle of the shot increases, draw and follow have less effect on the cue ball path.

(Getting Confused?   Don't worry, it'll become clear when you try it yourself.   Feel free to play around with these options; take some time to give yourself a feel for choosing and setting up a useful spin.)

 Draw follow can be put on the cue ball by pressing and holding the E key and then moving the mouse to change the cue tip position vertically on the cue ball.   The blue dot on the cue ball shows where the cue tip will hit.
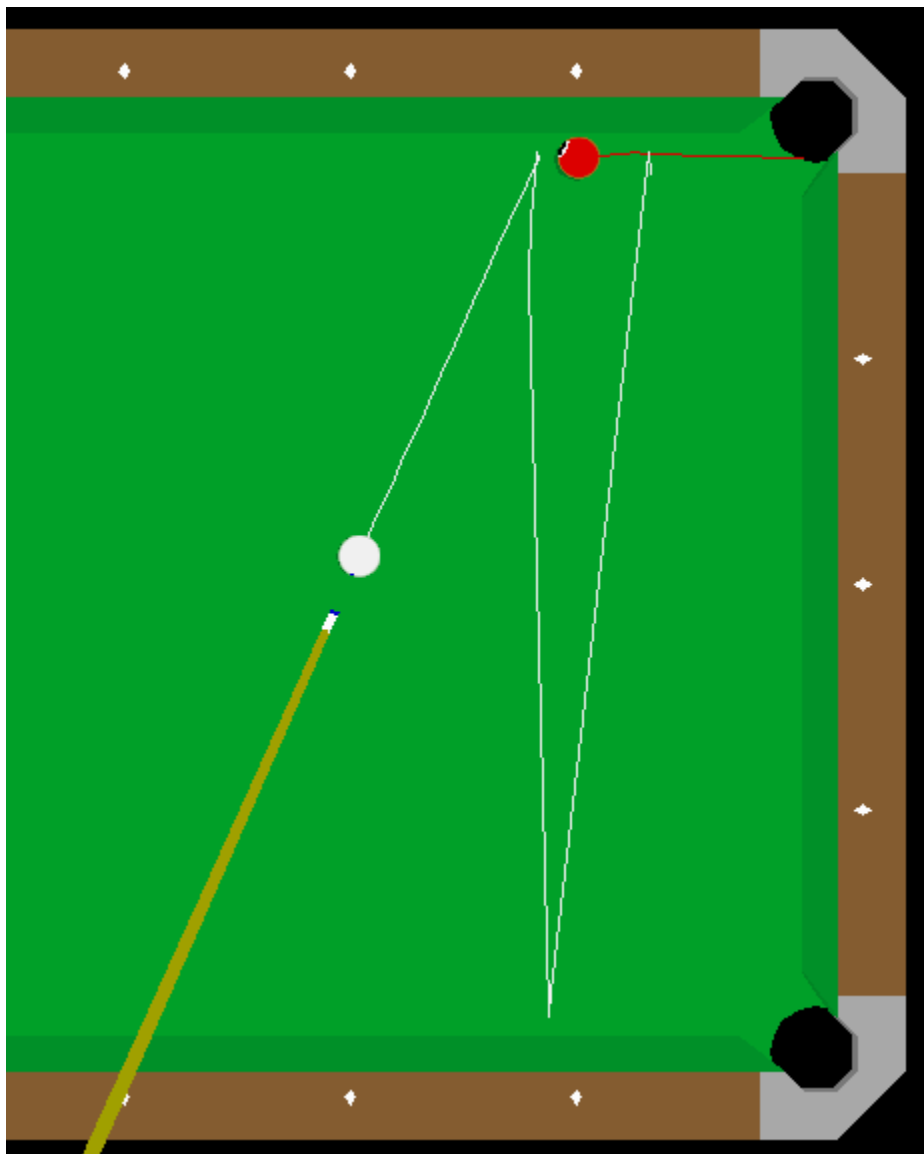
English

You can apply English (side spin) by hitting the cue ball off center to the left (for left spin) or to the right (for right spin).   It's much easier in a precision computer environment than with a real cue - this is your big chance to try out all those shots and tricks that experts use.

To put English on the cue ball, hold the E key and move the mouse.   The blue dot on the cue ball will show where the cue tip will hit.   English has its greatest effect on cue ball path when a rail is hit, as it changes the angle at which the cue ball rebounds from the rail.   Plus, it can add or remove speed from the cue ball.

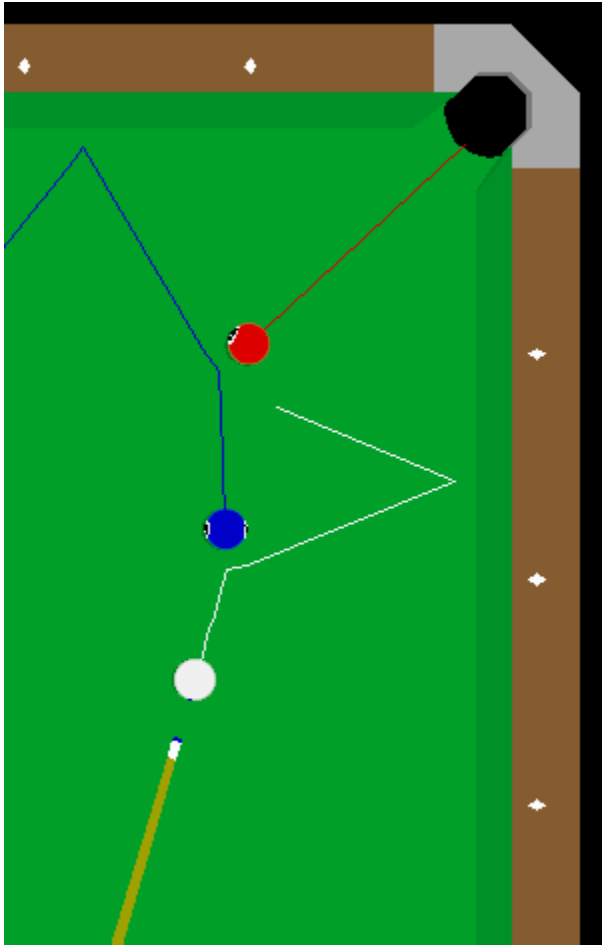Shown below is a rail shot hit with center ball:

The same shot with English has a great effect on the cue ball path off the rail:
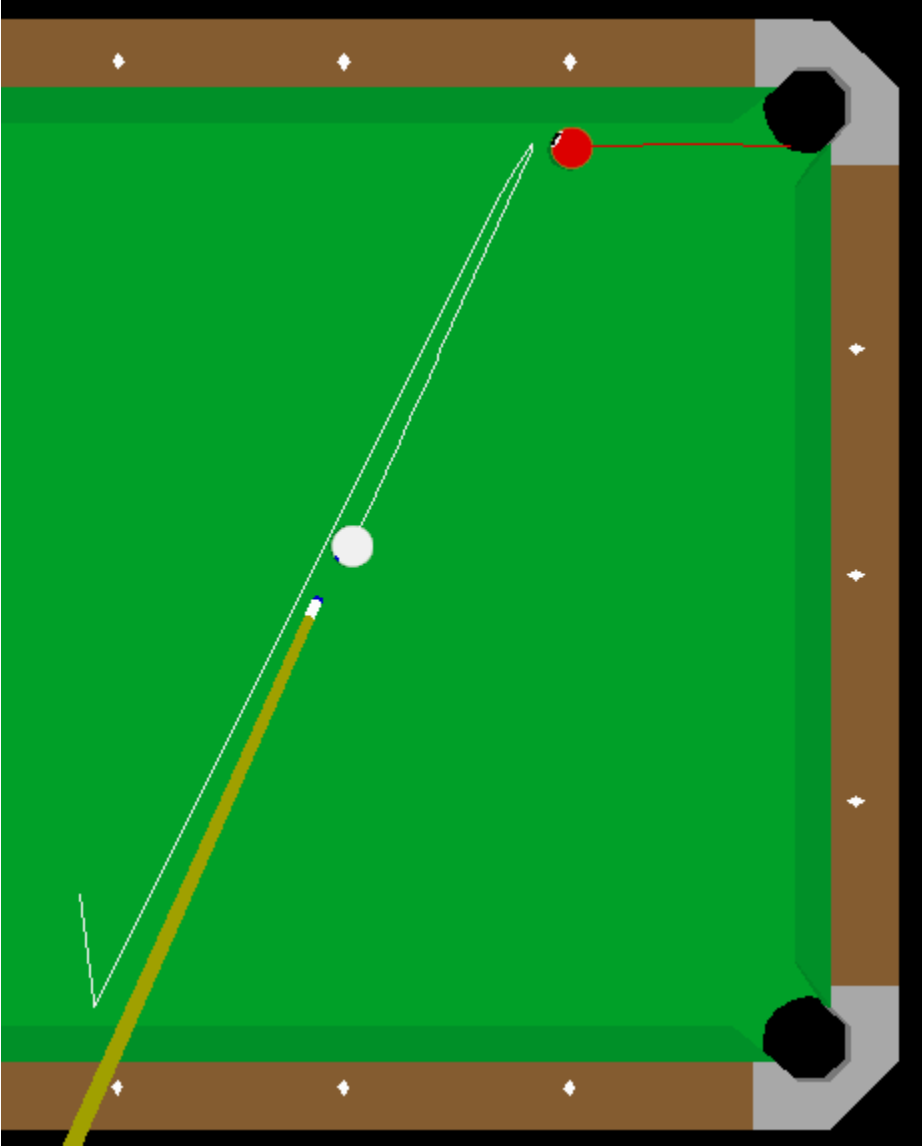
Combinations

A combination is a shot where two or more object balls are hit in sequence to pocket an object ball.

To line up a two-ball combination, first figure out the "contact point" on the second ball - the spot on the ball where you must hit it so that it'll shoot into the pocket.   Then determine the contact point on the   first ball that will cause it to hit the second ball's contact point.   Now aim the cue ball at the first ball's contact point.

Carom

A carom shot is where a ball (cue or object) hits off another ball.
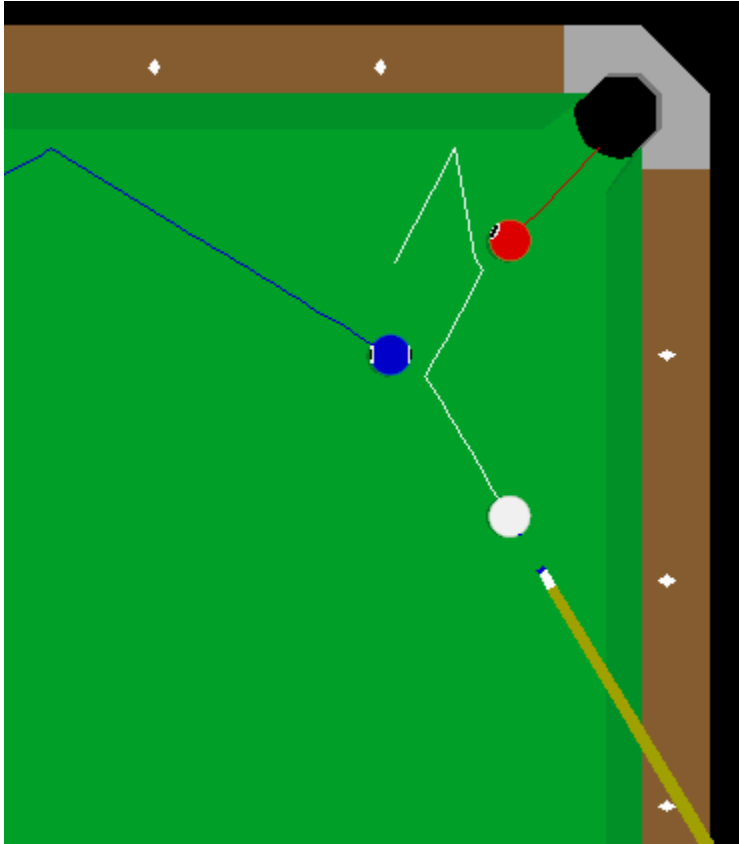
Use the knowledge learned from the [Cue Ball Path](#) section to become proficient at caroms.

Kiss

In pool, a kiss is a carom shot where two object balls are frozen together (touching each other) and a perpendicular line between them goes into a pocket.   Just hit the object ball on the side of the ball opposite the pocket and it's in.   Shown below is a typical kiss shot.
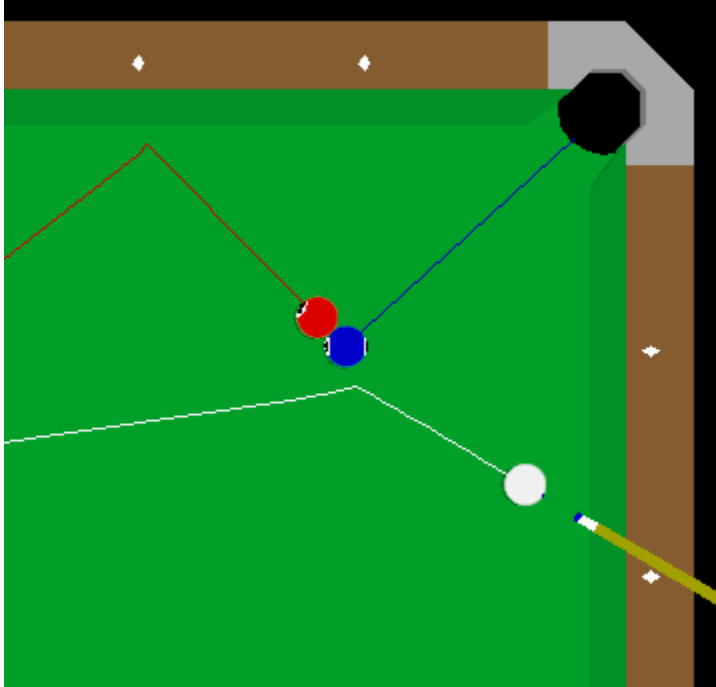
Introduction to Advanced Topics

Virtual Pool is so realistic that it accurately models even the more obscure physical properties of a real pool table.   This section reveals some unusual details that are not general knowledge outside of the realm of professional pool players.

Advanced Topics are:
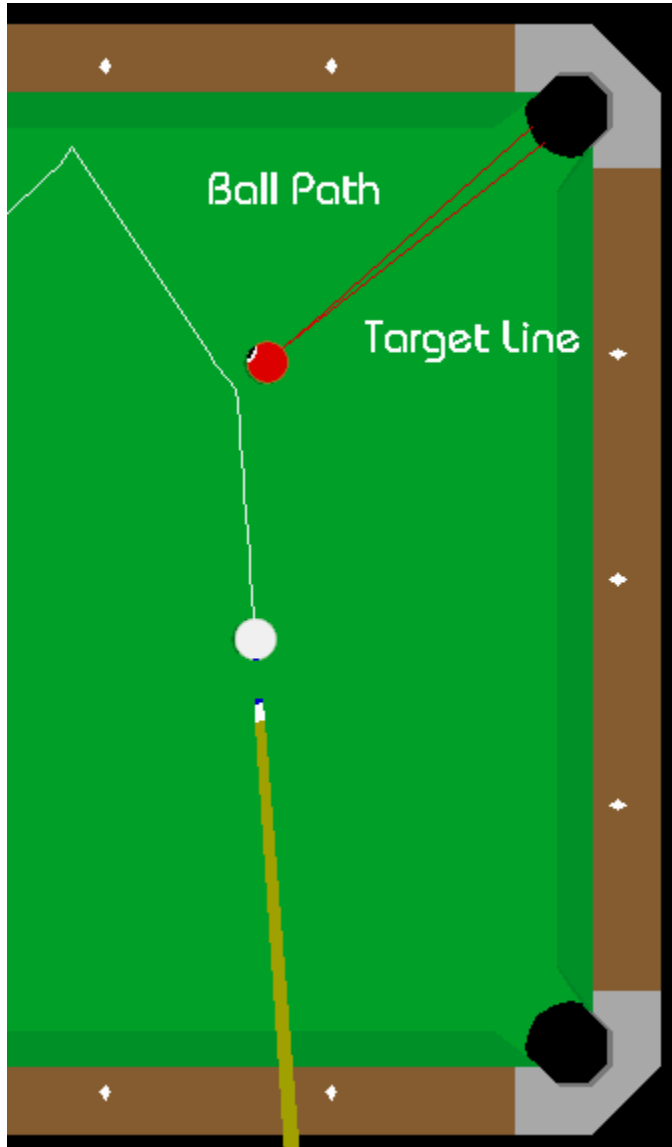
[Ball Throw](#)

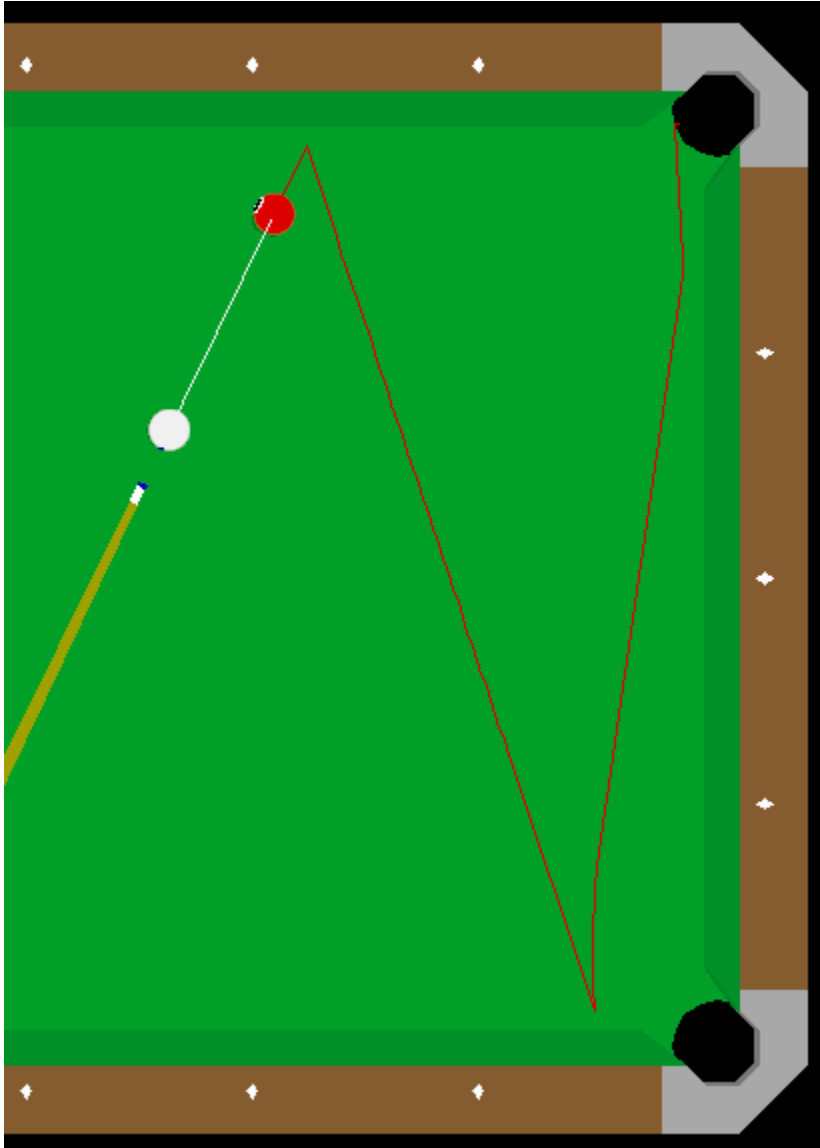[Spin Transfer](#)

[Masse'](#)

Ball Throw

Balls are thrown off-line by the friction between balls.   If the cue ball hits an object ball at an angle, the friction between the balls throws the object ball path off the perpendicular target line. The picture below illustrates this concept showing the actual perpendicular line (target line) and the actual ball path:

Spin Transfer

The same friction which makes an object ball "throw" also transfers spin from ball to ball. It's a small difference, but if you want to be a pro you've got to pay attention to every detail; in other words, when you're using English, you should remember to compensate for Spin Transfer when you're lining up your shot. Shown below are two bank shots hit with the same line and speed. The first shot is hit with center ball:

The second shot is hit with left English:
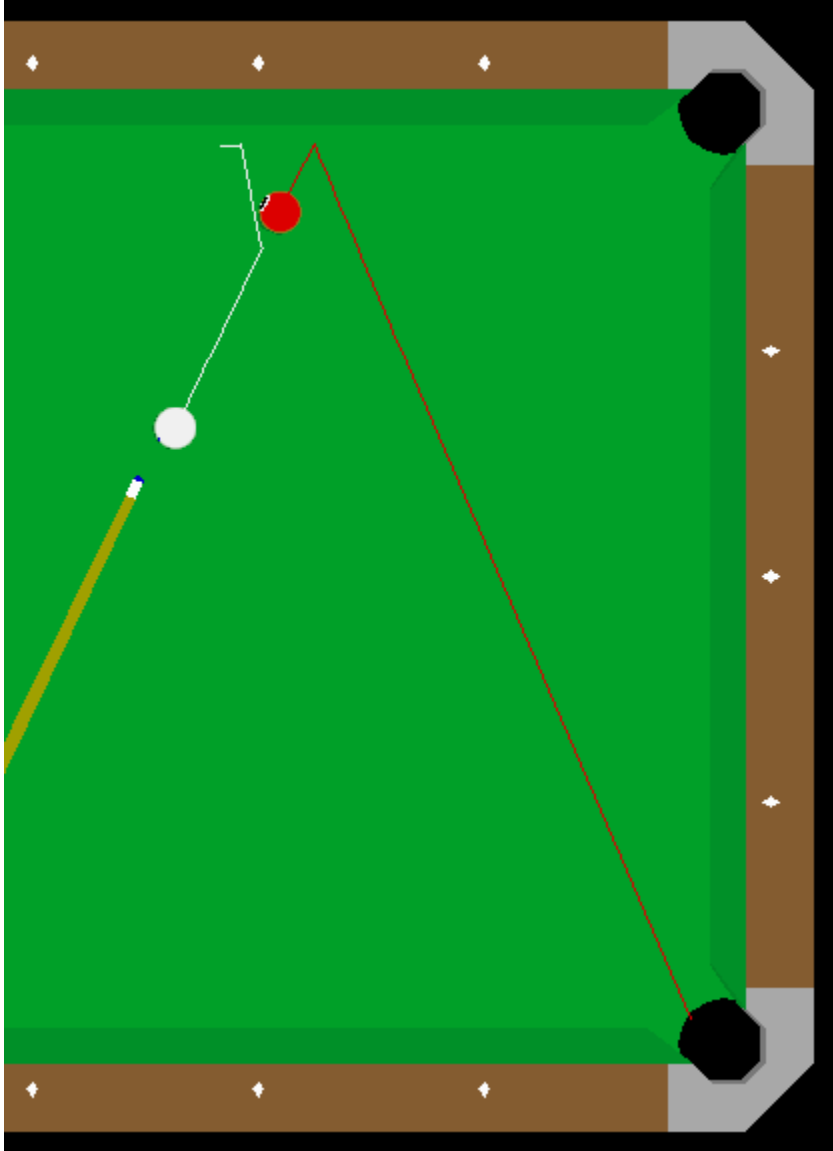
The rebound angle of the second shot is increased because of the spin transfer from the cue ball to the object ball. Left spin on the cue ball is transferred to the object ball as right spin, causing the rebound angle to increase.

You can use English to offset ball throw (see Ball Throw). In the picture below, a small amount of left hand English is being applied to the cue ball to remove the throw effect. This happens because the angular velocity at the contact point cancels the linear velocity resulting in no friction and no ball throw.
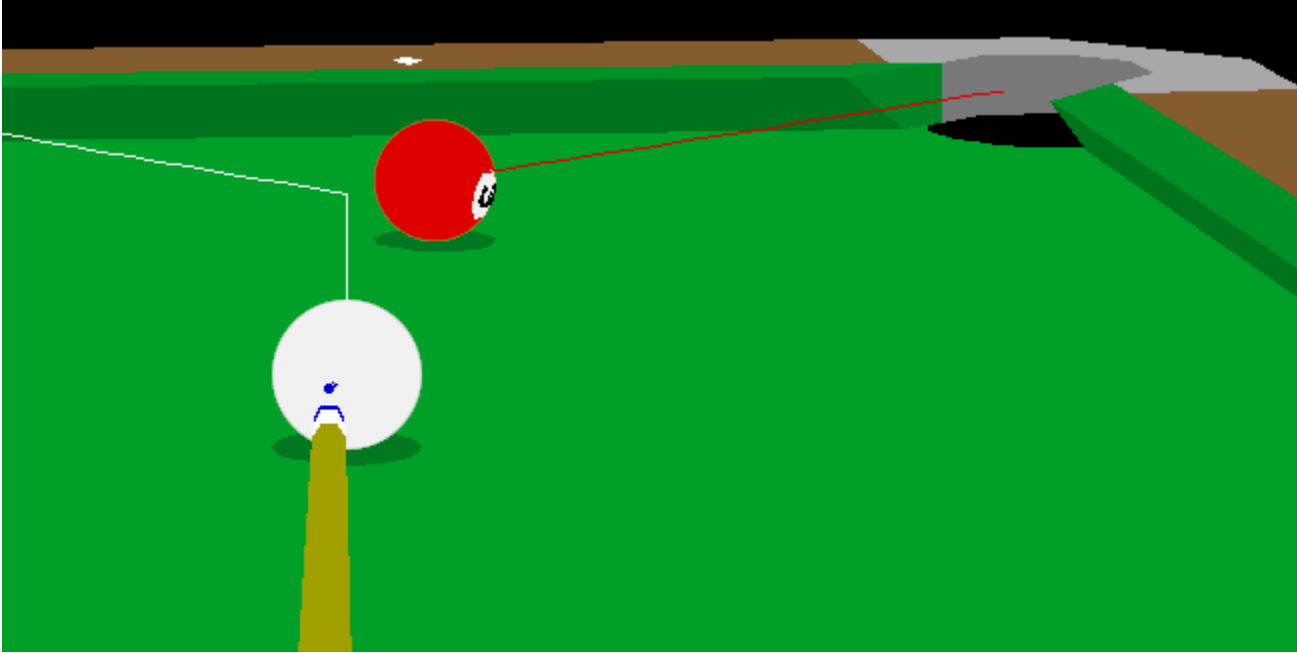
Masse'

Hitting downward on the cue ball by raising the butt of the cue is called a masse' shot. (This is the kind of shot banned in many sets of house rules because inexperienced players are quite likely to miss the ball completely, stabbing down with the cue stick and tearing a gash in the table's felt!)   The cue ball will curve in the direction of any English applied to the ball; therefore, a masse' shot hit to the right side of the cue ball will curve to the right and so on.   How much the ball curves, how sharp the curve is, and how fast the cue ball moves are of course determined by:

 The butt of the angle of the cue stick

 The cue tip position

 The speed of the stroke
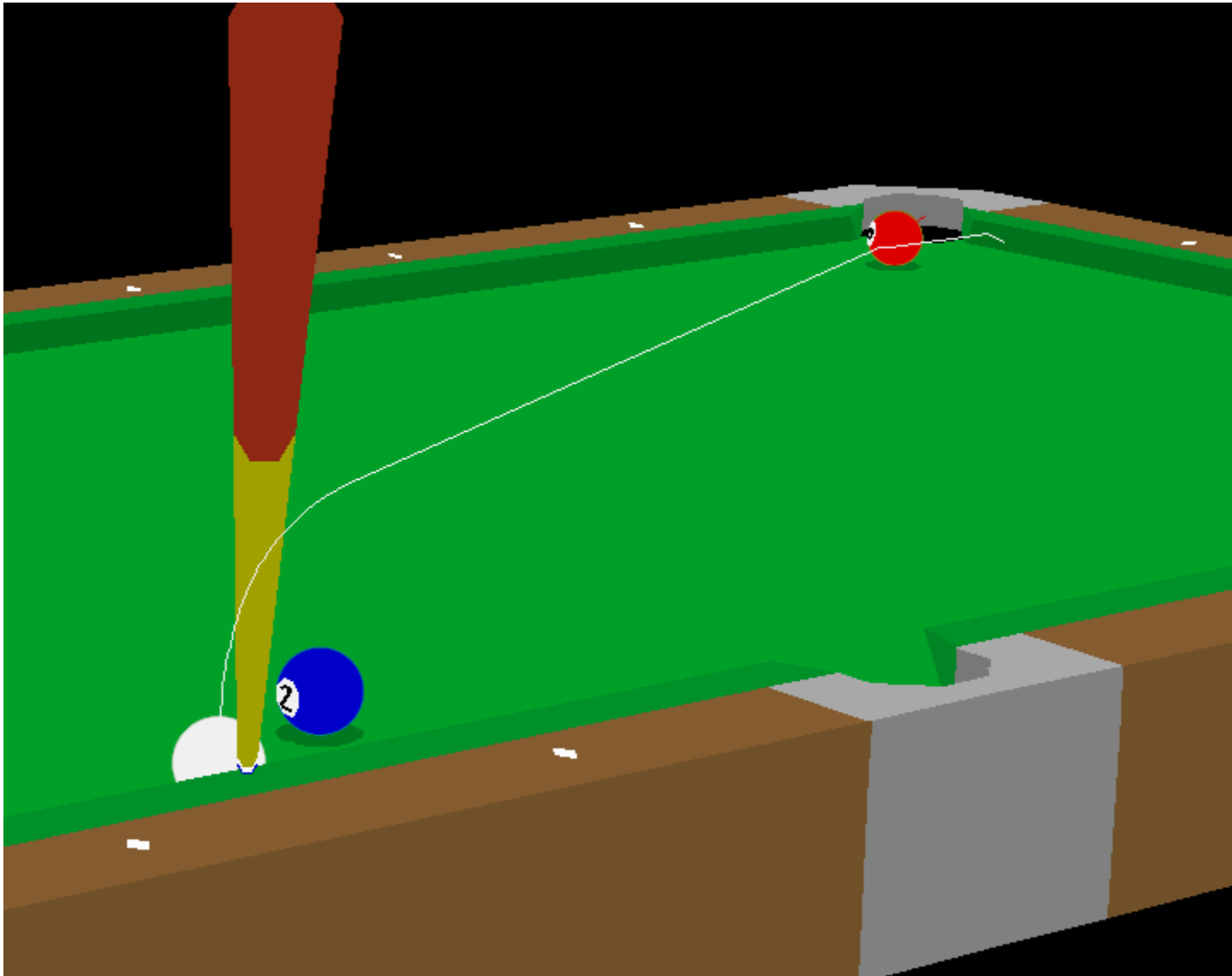
Masse' shots are difficult to master, but with some work they can be quite effective.

Appendix A: Helpful Hints

- Use the Amplify feature when breaking (taking the first shot of the game).

- Practice with Tracking on until you feel comfortable lining up shots yourself. Experiment with Tracking.

- Line up difficult shots without Tracking, then turn Tracking on to see how close you were.   Remember,   anything you learn here can be applied to a real pool table.

- Use the Replay feature to see how you can correct missed shots.

- The force with which you strike the cue ball has an effect on the path the cue ball will take, especially when you add some draw, follow, or English.   Use Tracking to experiment with varying force and different cue tip positions.

Appendix B: Glossary

8-Ball	A pool game where the object is to pocket all of the striped or solid balls, saving the 8-ball for last.
9-Ball	A pool game where the object is to sink the 9-ball.
Amplify	Mouse movements are exaggerated when amplify is on. Toggle Amplify with shift key.
Ball-in-hand	A player who has ball-in-hand can place the ball anywhere on the table or (depending on the game and situation) anywhere behind the head string.
Bank	Playing a ball off of one or more rails and then into a pocket.
Break	The first shot, the one which scatters the racked balls.
Call	Specifying the ball and pocket for a shot attempt
Carom Shot	Playing any ball off an object ball to knock another object ball into a pocket.
Combination	Playing a shot that hits multiple object balls in a series and pocketing the last object ball hit.
Cue Ball	The white ball that you hit with the cue stick so that it strikes the other balls.
Cue Stick	The stick used to hit the cue ball.
Cue Tip	The end of the cue stick that makes contact with the cue ball.
Diamonds	Markers on the table that are used to assist aiming. The markers and the pockets divide the long side of the table into eight equal parts. The markers divide the short side of the table into four equal parts.
Draw	To hit the cue ball below center.
End Rail	The rails at either end of the table.
English	Hitting the cue ball off center to the right or left producing right or left spin on the ball.
Fine Tune	Mouse movements are less sensitive when Fine Tune is on, so mouse movements make small changes. Toggle Fine Tune with the Ctrl key.
Follow	To hit the cue ball above center.
Foot	The end of the table where the balls are racked for the break.
Foot Spot	The center of the foot end of the table, marked by the second diamond at the foot end. This is where the balls are racked and spotted.
Foul	An infraction of the rules of play as defined in either the general or the specific game rules. The penalty depends on the game.
Frozen	A ball which is touching the rail or another ball.
Head	The end of the table where the cue ball is placed before the break.
Head String	The line between the two center diamonds at the head of the table. You must break from behind this line.
Head Spot	The center of the head string.
House Rules	Many pool halls and bars have their own specific set of rules for a game. For instance, many places don't allow masse' shots for fear of damage to the tables' felt.
Inning	One player's turn at the table. Ends at the end of a game, a

	missed shot, or a foul.
Kiss Shot	Hitting two frozen object balls at an angle so that an object ball is pocketed along the line perpendicular to the frozen balls.
Masse'	A shot in which extreme English is applied to the cue ball by means of elevating the butt of the cue.
Miscall	Making a shot other than the one intended.
Object Ball	Any ball hit by the cue ball.
Pocket	To legally sink a ball into a pocket. The word "make" is also used.
Position	To pocket a ball and leave the cue ball in position for the next shot.
Race	To play a match where the winner is the first to win a specified number of games.
Rack	To set up balls at the beginning of the game; also, the cluster of balls set up at the beginning of a game.
Rails	The raised edges of the playing surface off which the balls bounce.
Rotation Pool	A pool game where you have to sink the balls in numerical order. Each ball is worth its number in points.
Run	To make several consecutive balls.
Run Out	To make all of the balls on the table without giving your opponent a chance to shoot.
Scratch	Pocketing the cue ball.
Side Rail	The rails on the sides of the table.
Slop	A ball that is pocketed by luck.
Spot	To place a ball at the foot spot as a result of a scratch or other foul.
Straight Pool	A game where the balls are worth one point each and can be pocketed in any order. The game is played up to a pre-set number of points.
Tracking	Feature of Virtual Pool that shows you the exact path of every ball on the table, based on the current Aim and Force level.

Alt-L: Load Saved Game or Saved Position

Use this command to load a previously saved game.   In practice mode, this will load a menu of saved trick shots.

Alt-S:Save game or position

Alt-S saves the current game.   You can use this to save a game to resume later, or you can use it to save trick shots.   You must enter a name to save the shot under.

Virtual Pool Tip: Mouse Sensitivity

Try lowering your mouse sensitivity if you're having trouble with Speed Control.

Virtual Pool Tip: Cue Tip Position

When putting English on a ball, don't use more than the measure of one cue tip off of a center ball hit, unless shooting shots which require excessive cue ball spin. With Virtual Pool you can put tremendous amounts of spin on the cue ball. Using cue tip distances within one tip of center reduces spin errors caused by incorrect stroke speed. In other words, controlling the cue ball with extreme cue tip positions requires great stroke speed control.

Virtual Pool Tip: Aiming

As in real life, you can get a new perspective by raising your head a foot or two for a better view of the angle between the pocket, object ball and cue ball. Then lower you head to line up the cue ball and object ball keeping the angle you saw in mind. Tilting the table up and down (by moving the mouse forward and backward) will help you see the angle better.

Virtual Pool Tip: English

English complicates the aiming processes.   First learn to play using Follow and Draw then add English to your repertoire.

Virtual Pool Tip: Butt Angle on Masse' Shots

The butt angle readout in the status area makes it easier to reproduce masse shots.   Find out which angles work for certain types of shots and you'll find it much easier to pull them off in game situations.

Virtual Pool Tip: Control Stroke Speed by Varying Backstroke Length

Stroke speed is very important for cue ball control. Using backstroke length to control stroke speed makes you more consistent. By accelerating the mouse smoothly, the same way for each shot, backstroke length varies cue ball velocity. The further back your cue tip starts the higher the velocity when you hit the cue ball. For easy shots pull the cue back a little. The harder you want to stroke the cue ball the more you pull back on the cue. This works well in real life too.

Quick Reference

A:	**Aim**
S:	**Shoot**
V:	**Change View**
X:	**Examine table**
M:	**Select and move ball**
B:	**Raise butt of cue**
C:	**Move Center Point**
E:	**English: Move cue tip**
F:	**Vary Force of Tracking hit**
H:	**Select a different ball to move**
Left Mouse:	**Zoom**
Shift:	**toggle Amplify**
Ctrl:	**toggle Fine Tune**
L:	**Toggle table lines**
O:	**Overhead View**
R:	**Replay last shot**
T:	**Toggle Tracking**
U:	**Undo**
Z:	**Zip to result**
+/=:	**Increase replay rate**
-:	**Decrease replay rate**
/ :	**Send communication to remote player**
Alt-D:	**Draw game**
Alt-G:	**Return to game**
Alt-K:	**Kibitz shot**
Alt-L:	**Load Saved Game or Saved Position**
Alt-M:	**Declare miscall on previous shot**
Alt-P:	**Pocket Selected Ball**
Alt-Q:	**Quit current match**
Alt-S:	**Save Game or Position**
Alt-T:	**Change player turn**
Alt-V:	**Return to Video**
INS:	**Spot/Pocket ball menu**
ESC or F10:	**Opens Main Menu System**