Peaks and Pits
A new domino game by Adrian Morgan

What to expect and what you'll need

Peaks and Pits is a game I invented in 2006, using a set of dominoes. In some ways it resembles traditional domino games, but it adds unique characteristics based on a metaphor in which the numbers on the tiles represent the altitudes of hills and valleys.

Peaks and Pits exercises the intellect more than traditional Dominoes does, and players who tested it on 7 October 2006 described it as "*The Thinking Man's Dominoes*". However, it is primarily a game of chance, and demands very little strategy or concentration. Also, no mathematics is required beyond the ability to count. The rules are simple (if not as simple as the traditional game) and easy to learn for adults and older children. I think it merits being described as elegant.

You will need a set of domino tiles, at least a hundred small objects to be used as tokens, and three to five players. I recommend playing with a double-nine set of dominoes, but a double-six set will do. The tokens can be poker chips, buttons, or similar objects - whatever is available.

Starting the game

At the start of the game, a tile called the STARTER TILE must be placed in the middle of the table. If you are using a double-six set, the starter tile is the [6|0]. If you are using a double-nine set, the starter tile is the [9|0]. When this tile is in position, turn all the other tiles face-down and shuffle them.

Each player then recieves a number of tiles, this number being known as a FULL HAND. If you are using a double-six set, a full hand contains exactly three tiles. If you are using a double-nine set, a full hand contains exactly five tiles.

Players must also receive an equal number of tokens. I suggest five or six tokens each, but it doesn't matter as long as everyone gets the same number. The majority of available tokens should remain undealt, and if any player runs out of tokens during the game, an equal number of extra tokens must be dealt immediately to **all** players before continuing.

Players should note that the object of the game is to be the player with the *fewest* tokens when the game ends. Players should therefore seek to get rid of as many tokens as possible, and to avoid collecting them.

Basic concepts

Peaks and Pits resembles traditional dominoes in that players construct a long line of dominoes called the *train*, by adding tiles to its two ends in accordance with the rules. The train may turn a corner on a player's whim, and doubles are conventionally played crosswise. Tiles not yet in the train or in a player's hand are kept face-down in a repository known as the BONEYARD.

The main new concept in *Peaks and Pits* is the idea of a SLOPE. A slope is simply a segment of the train in which the numbers on the tiles progress in a particular numerical direction (either upward or downward). This direction is read *away* from the starter tile (see the diagram below). Each tile on the train belongs to only one slope, except for the starter tile which is not part of any slope at all.

What about doubles? Usually, a double is part of the same slope as the *previously-layed tile* on the same end of the train (in other words when a double lies at the boundary between two slopes, the boundary occurs after the double, not before it). The only exception is when the double is layed immediately adjacent to the starter tile, in which case it belongs to the same slope as the *next* tile to be layed beside it.

Here is a diagram of a hypothetical train, with slopes labelled. Please look at it carefully it to confirm that you understand the explanation above.

7/7	7|8	8|5	5/5	5|0	0/0	0|9	9|8	8/8	8|3	3|9	9/9	9|7	7|4	4/4	4|6	6|5
dnwd slope	*upward slope*		*upward slope*		**start**	*downward slope*				*upward slope*		*downward slope*			*upwd slope*	*dnwd slope*

Having a turn

Players decide by consensus who should start, and turns rotate around the table.

A player's options during a turn are described below. In this game (unlike traditional Dominoes), a player can add more than one tile to the train in a single turn, but all tiles played in the same turn must belong to the same slope.

* Option one is to extend an existing slope by playing one or more tiles that become *part of the same slope* as the tile at the end of the train where they are laid. For example, if the tile at one end of the train is currently the [6|5] with the [5] on the very end, then the slope on that end is downward. Therefore, playing the [5|3], [3|3] and [3|2] (in that order) would extend the existing slope, because it continues the existing downward trend.

* Option two is to begin a new slope by playing one or more tiles that *constitute a slope in a new direction* instead of extending an existing one. For example, if the tile at one end of the train is the [3|2] with the [2] on the very end, then playing the [2|4] begins a new slope, because it reverses the numerical direction from downward to upward.

* Option three is to PASS by not adding any tiles to the train at all. However, passing incurs a hefty penalty described shortly.

Immediately after playing one or more tiles, the player places a token next to each of the tiles that they have just played. This is how players can get rid of tokens. However, a player who terminates an existing slope by beginning a new one must pick up the tokens next to the tiles in the slope they have just terminated.

For example, let's suppose that the slope at one end of the train consists of [6|5], [5|3], [3|3] and [3|2] (a downward slope), and you begin a new upward slope by playing [2|4] and [4|5]. Then you would get rid of two of your tokens by placing them next to the two tiles you've just played, but you would also receive the four tokens next to the [6|5], [5|3], [3|3] and [3|2], finishing the turn with a net penalty of two tokens.

To complete the turn, a player takes the same number of tiles from the boneyard that they placed on the train, i.e. finishing each turn with a full hand of tiles.

Passing incurs a penalty from the repository of undealt tokens. The number of tokens received as part of this penalty equals the total number of tokens next to tiles on both ends of the train. For example, if the slope on one end of the train contains two tiles and the slope at the other end of the train contains three tiles, then the player who passed receives a penalty of five tokens from the repository.

What happens once the boneyard is empty?

Once the tiles in the boneyard have all been used up, the game continues, but with the following changes.

Players no longer replenish their hands at the end of a turn. A player who uses up their last tile takes no further part in the game until the time comes to count tokens and find out who won.

Also, it becomes possible for a player to gain IMMUNITY from the usual penalty for passing. As described above, a player who passes usually has to accept a penalty from the repository of undealt tokens. However, *you are exempt from this penalty if at least one player has more tiles than you do*. For example, if you have three tiles left in your hand, then you may pass without penalty if at least one other player has four or more tiles remaining.

(Consequently, a player who has immunity is likely to pass as a tactical decision rather than as a necessity.)

Ending and scoring

The game ends when all players left in the game pass. Once the game has ended, the player who has the fewest tokens wins, the player with the second-fewest tokens comes second, and so on.