

Brassbeat's Guide To Peggle Deluxe - Any%

I made these notes as a collection of strats and general level approaches, hoping to be able to cover reasonable beginner strats up to the current top-level meta. Of course, with Peggle speedruns evolving as quickly as they are, I could definitely use some help in keeping this up-to-date, so feel free to comment with anything you feel makes sense to include!

For those reading this who are new to Peggle speedrunning: this document may be a bit bulky to take in all at once. If you just want to get a run started with some decent strats, you should at least read the "Strat Notation" section below. I've made a short document with beginner strats that's hopefully concise enough to follow along as you run:

[Peggle Deluxe - Any% - Brassbeat's beginner strats](#) .

I wanna give my sincere thanks to everyone in the community who has been a part of the creation process:

- pnaha, SatanHerself and britsha for being there with advice whenever I needed it;
- anyGeorge, who wasn't directly involved, but whose [writeup on Nights Any%](#) was my main inspiration for starting this project;
- Smiling_marx, who provided us with the big data we needed to bring the Peggle Deluxe speedrunning meta to the next level;
- and of course, everyone else who was involved in looking for strats, helping the run forwards one step at a time.

Strat Notation

In order to make the chaotic nature of the levels a bit more bearable, we use certain strats at the start of the level to be able to do the same inputs every time: that way we should be able to get a certain shot that we know will be good. Of course, when moving elements are involved, we would only be 100% certain what the shot would do if we could hit the same frame every time, but even then, we usually can time our shots to be in a good window.

An important detail about these strats is that they are all made to be used with **3D acceleration off**. If you have 3D acceleration on, then the game computes the physics differently, which will make strats do different things. Unfortunately, this effect is a bit buggy, so if you have 3D acceleration on, you'll have to untick the setting and then reboot the game for the changes to take effect.

If you press **Ctrl+Alt+D** you get a windows error sound that indicates you've enabled debug mode; now you can press **Shift+F3** to display coordinates.

The strats we use come in a few varieties:

Tap strats are the simplest ones: simply aim all the way to the left (L) or right (R), then tap the opposite direction on the arrow keys a certain amount of times. So R3 means: from all the way to the right, tap the left arrow key 3 times.

Downshots are not that common of a strat in deluxe, but they do appear a few times. To do these you wanna aim your cursor to be on this line on the character's portrait:



The important part here is that your x-coordinate should be 400. The cannon kinda snaps to certain positions when you do this, so if it looks like you're pointing straight down it should be fine. Usually this is combined with arrow taps, either left or right. So DL5 means: do the downshot setup, then tap left 5 times.

Edge shots are a somewhat uncommon strat where we use the scroll wheel to line up a certain shot. Basically, if I refer to something as "3 on" a certain level element, then we want to be aiming for a near miss of that element:



and then scroll (either with the scroll wheel or with the arrow keys, your choice) until the

- Some of these strats are set up from a maximal side angle, which makes these strats fully deterministic like the other classes of strats, whereas some of these strats don't actually need to be fully deterministic, in which case we set up the starting position by aiming in an imprecise way.

- If you see the term “glint shot”, then this refers to a pixel shot where we use the white speck on either a peg or one of the bolts on the side frame, like this:



Bear in mind though: nowadays most “glint shots” have a somewhat offset setup, so make sure you study them as well as the other pixel strats you’re going for.

- There are a few cases where there is a pixel-tap combination. That is, aiming at the correct pixel and then doing arrow key taps. If you’re not confident you can hold the correct mouse position when doing this, you can set up mouse keys beforehand, and once you’ve set up the correct pixel with the mouse released, do the arrow key taps and press Numpad 5 to shoot.

As a final note, how to make sure you have all the strats ready during the run: since you usually have a few seconds between each level, it’s perfectly doable to have a document of some sorts open on the sides that you can just read level by level during the run. Please don’t do that with this document though, it is just way too wordy. Instead, I would point to the way pnaha has formatted his document: [Peggle Deluxe & Nights strats](#) . In the past I made a presentation to look at during runs [Brassbeat's Peggle Deluxe Any% Notes](#) , but I haven’t updated it in a while. I would suggest making a copy of either of these and adding the strats you are planning to go for.

Bucket timings

Most strats will have a bucket timing associated with it, which is there to make sure you get an extra free ball from the shot. These are not always super necessary to go for, but I will list them whenever there is a sensible window to go for.

For the timings I have marked 24 points on the bucket cycle, which are evenly spaced apart time-wise (so $\frac{1}{4}$ second between any two consecutive ones). The sign stands for the direction the bucket is moving, “+” for moving right, “-” for moving left, and “~” for stationary (on the far left or far right):



These are applied as a suffix to whatever strat we're going for, so in, for example, R3+4 we are aiming for the bucket to be moving right, with its right edge on the middle of the screen.

General Gameplay Tips

Free Balls

From my experience doing runs, a high-level run uses ~600 shots combined, so on average you'd need 11 shots per level. You can expect the hard levels to require ~12-13 shots. This means we need a few ways to get reliable free balls:

- Firstly, the strats we use can usually be timed to go in the free ball bucket. This is explained in more detail in the "Strat Notation" section.
- Later on in the level, you can try getting free balls from getting a 25k point shot. For this to work, you typically need a somewhat high multiplier and a region with a decent amount of pegs left, so it works best if you can save a region with just a handful of oranges (not too many, since then those oranges are not raising the multiplier).
- If you're at the end of the level and you just need a few more extra shots you can try going for Free Ball Skills. It takes a bit of practice, but with a bit of skill you can take out a bunch of pegs one at the time. The time investment if you have to do this for a bunch of levels is going to add up quickly, though, so you should be primarily working on getting free balls earlier on.

- When bouncing off of a peg, the easiest setup is to aim for the side of the peg, so you get a bounce that behaves very much like a wallbounce. Such a setup might not always be available though, so it's a good idea to also practise shots on different setups.
- It is fairly easy to predict a bounce off of a flat brick, as long as you aren't forced to bounce off of a corner.
- Curved bricks can often be a bit unintuitive. If certain structures tend to give you a problem, then you should practise the bounces on that structure specifically, but unlike with other kinds of elements, it's hard to get a good general intuition on them.

Efficiency

Obviously, if a shot ends up getting a high bounce from the top of a structure, then that is a lot of time spent without hitting any pegs. So we have to do our best to avoid such cases.

In general we want to plan out our shots so that the ball is headed mostly downwards afterwards. If there are nearby pegs I can usually go for a shot like this



but how effective that is depends on your ability to plan out two short bounces.

As the level progresses, you may find some cases where a single orange has a big open space around it. You may be tempted to try to make a long combo with this peg into some other region, but these are usually not very effective. If you have the balls to spare, it's better to just spend a full shot to collect that peg quickly.

There is a hidden mechanic in the game that we refer to as “microzen”, it only shows up in Any% conditions, so it's worth mentioning here. Basically, sometimes the game applies a very small Zenball effect to your shot with only a handful of simulations. Aside from 1-1 (which I'll get to later), we know that when it does happen, it tends to be at 2 balls left at the earliest, and

sometimes not at all. This means that the main consequence of microzen is just to make slowdowns from random bounces near the end of the level more likely if the shot you're going for is a near miss of something.

In particular, we want to be able to finish the level with a shot that heads cleanly for the fever bucket, as getting a bad bounce there can easily lose you 5 seconds at once. It's a good idea to save an orange that's reasonably close to the bottom to get an easy fever shot.

A last note for levels with lots of moving elements: you want to work on minimising the amount of fast-forwarding you need to do. That doesn't exactly mean going for harder/more precise shots if they line up first, but more so planning out which elements you need to clear out are available to hit first.

Fast-Forward Glitch

While fast-forwarding when you're aiming does not save time unless there's an actual timing you're going for, if you hold fast-forward while you're shooting, you end up getting two frames of fast-forward *after* the cannon has fired. This ends up saving 14 frames, or about 1/7 of a second.

That doesn't sound like a lot, but it's 1/7 of a second *per shot*. We can go by the same 600-shot estimate for the entire run, but there are still some shots that are gonna require a fairly precise timing, mostly the ones that involve moving pegs. Even then, you can still likely save 1:15 doing this.

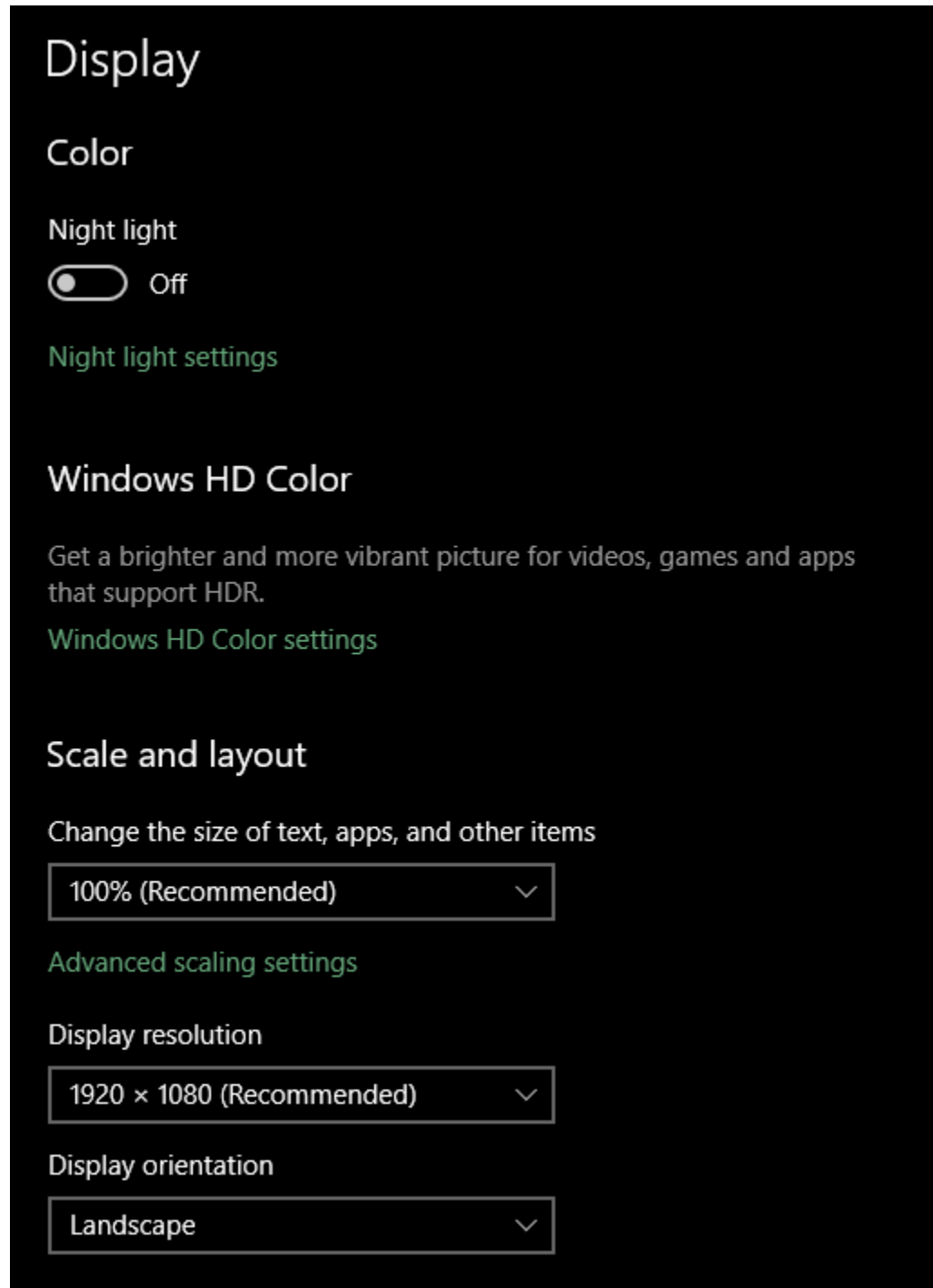
Menuing/Miscellaneous Speedups

- At the start of any level, you can skip the animation of the pegs spawning in by left-clicking almost immediately after entering it.
- At the end of every shot, there is a short fade-out sequence where your points are counted. You can hold right-click to fast-forward this. This also applies to the ending sequence during fever.
- There's two master-specific sequences you can skip with a left-click: the spinning of the wheel from Warren and Hu's "thinking" sequence after you take a shot with Zen ball. In the case of the spin, you have to click on the wheel itself, not just anywhere.
- If you get the "fever cam" during a shot the game will apply a slow-motion effect, which you have to cancel with a left-click.
- At the end of most levels you can perform the so-called "dialog skip". You just need to press the "Continue" button with left+right-click simultaneously (in theory, a combination like middle+right-click also works). Then you will enter the next level without getting the dialog box you normally get in adventure mode. This trick works on any level except the x-5 levels (where you will go to the stage introduction dialog instead) and the 11-x levels (where there is a character selection dialog that can't be skipped).

Tech Support

Display Settings

Once you want to start learning pixel shots you should make sure your display settings don't make things needlessly difficult for you. Firstly, let's look at **System > Display**:



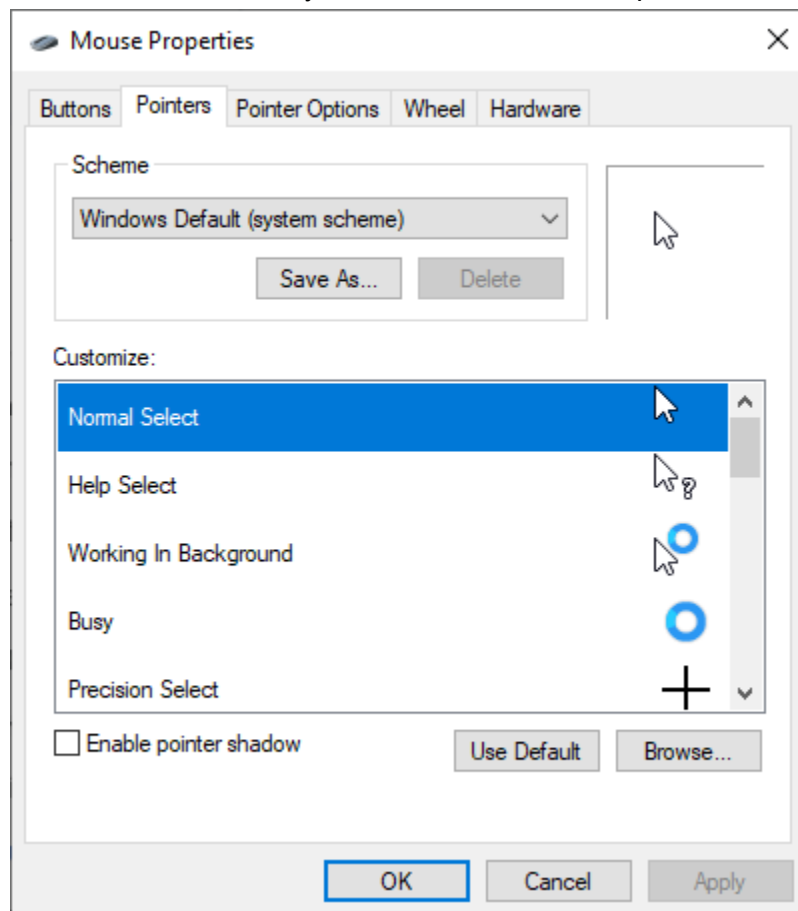
The most important setting is the top percentage value, this should be set to 100%. Reasonably modern laptops tend to have a high screen dpi, so it may default to a bigger value. If it is above 100%, then mouse positions that correspond to different pixels may look like they are on the same pixel on your screen.

This may make the game screen too small for you, in which case you can turn down the display resolution instead.

Cursor Graphics

The option to change the cursor graphics is in an obscure Windows menu called “Mouse Properties”. On my PC, I can search for a link called “change the mouse pointer display or speed” and land at the correct menu immediately. Of course, it’s Windows we’re talking about, so I can’t give confident guarantees about that method.

If this doesn’t work, then you can go into the **Control Panel** and then click **Hardware and Sound**; on this screen you can find the **Mouse** option.

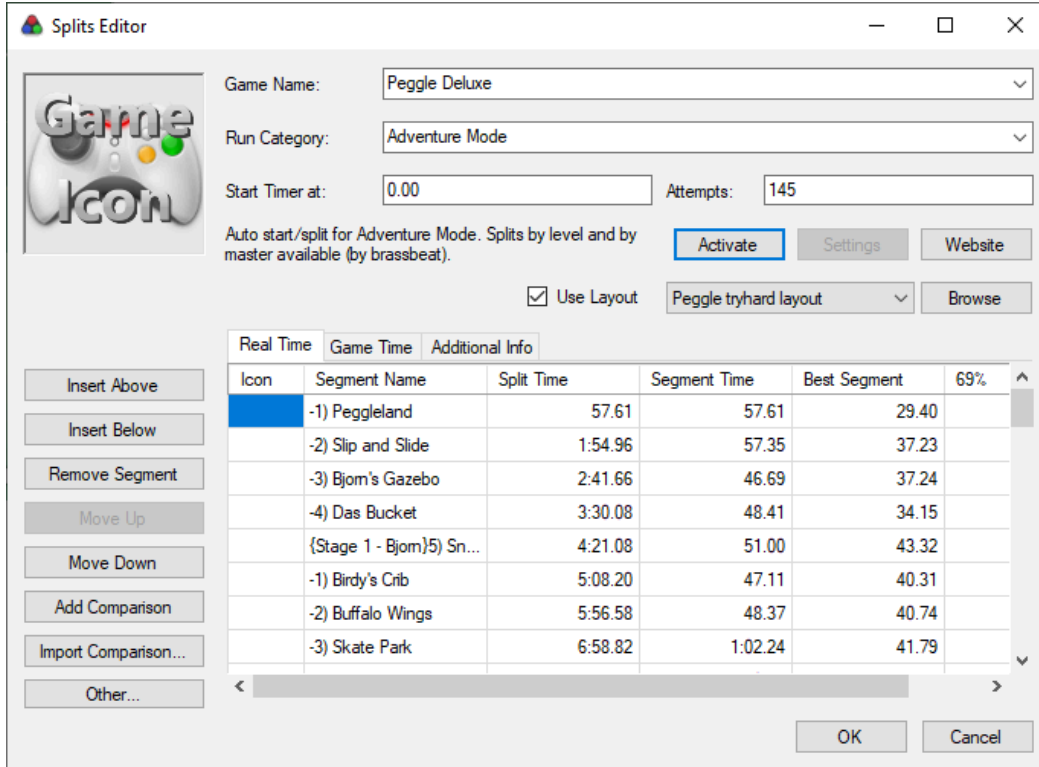


“Windows Default” is the pointer scheme that I use and what you’ll see in the images when I show strats. If you ever want to use something else, you can double-click “Normal Select” and find the file you want to use (the usual folder for this is something like C:\Windows\Cursor).

Autosplitter

We don't remove load times for Peggle runs, so there is no strict need to use an autosplitter. The autosplitter script that exists for this game is just there as a convenience.

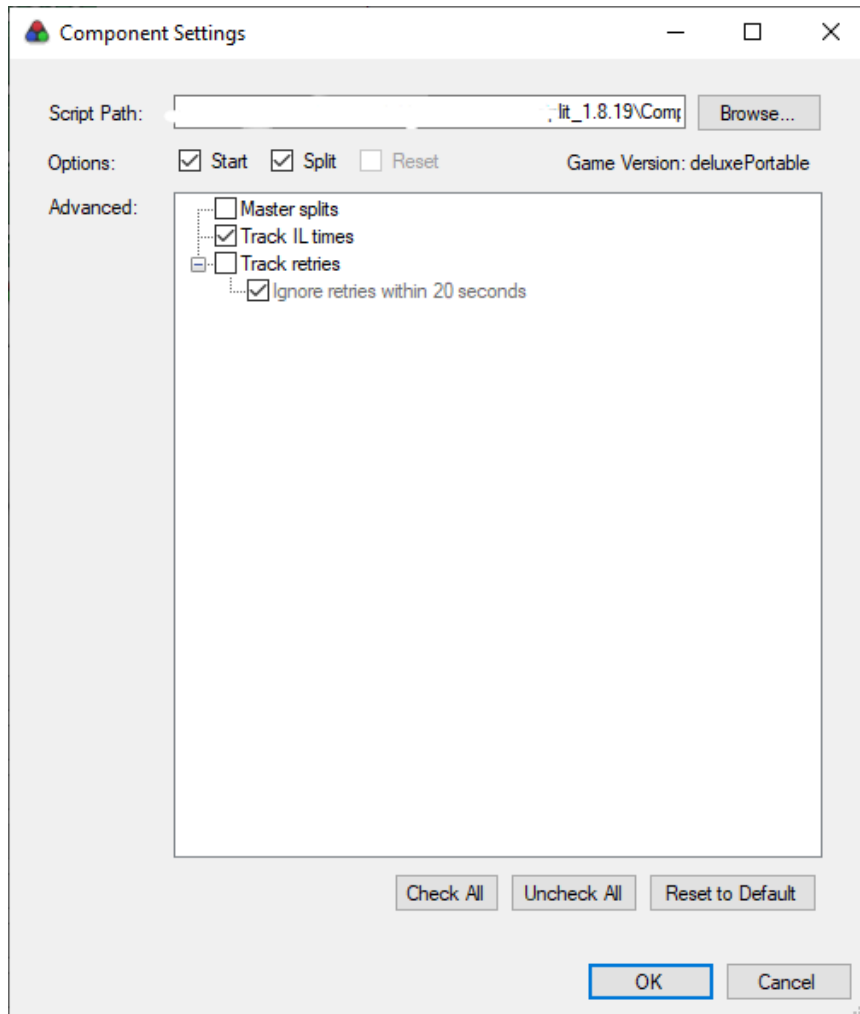
If you have at least the correct game name this text should show up.



The Splits Editor window for Peggle Deluxe is shown. It includes fields for Game Name, Run Category, Start Timer at, and Attempts. There are buttons for Activate, Settings, and Website. A checkbox for Use Layout is checked, and a dropdown menu shows the selected layout. A table of splits is displayed with columns for Real Time, Game Time, and Additional Info. The table lists segments with their respective times and percentages.

Real Time	Game Time	Additional Info			
Icon	Segment Name	Split Time	Segment Time	Best Segment	69%
	-1) Peggleland	57.61	57.61	29.40	
	-2) Slip and Slide	1:54.96	57.35	37.23	
	-3) Bjorn's Gazebo	2:41.66	46.69	37.24	
	-4) Das Bucket	3:30.08	48.41	34.15	
	{Stage 1 - Bjorn}5) Sn...	4:21.08	51.00	43.32	
	-1) Birdy's Crib	5:08.20	47.11	40.31	
	-2) Buffalo Wings	5:56.58	48.37	40.74	
	-3) Skate Park	6:58.82	1:02.24	41.79	

Click "Activate" and then "Settings". If Livesplit found a game process, it should list the "Game Version" as shown below. If it shows something like "deluxePortable" when you're playing the Steam version (and not using the No Pause mod), then you need to turn the autosplitter off and on again.



“Start” and “Split” are the proper autosplitting functions for starting and splitting respectively. If you want to, you can have these disabled while still having the extra features.

If you’ve set up to split once per stage and you want to use autosplitting, make sure you have “Master Splits” ticked.

“Track IL Times” adds a line in your layout which will display your level clear times during the run (in IL timing, which is slightly different from usual level splits).

Mouse Keys

A great tool for lining up hard strats is to use Mouse Keys. This is an accessibility setting that should come with any modern OS that allows you to use the numpad to move the mouse in a more controlled manner. To enable it in Windows:

- Open the **Control Panel**;
- Click **Ease of Access**;
- Click **Change how your mouse works**;
- Click **Set up Mouse Keys**.

I have it set up like this:

Set up Mouse Keys

☒ Turn on Mouse Keys

Use the numeric keypad to move the mouse around the screen.

Keyboard shortcut

☐ Turn on Mouse Keys with left ALT + left SHIFT + NUM LOCK

When using keyboard shortcuts to turn Ease of Access settings on:

☐ Display a warning message when turning a setting on

☐ Make a sound when turning a setting on or off

Pointer speed

Top speed:

Low  High

Acceleration:

Slow  Fast

☐ Hold down CTRL to speed up and SHIFT to slow down

Other settings

Use Mouse Keys when NUM LOCK is:

☐ On

☒ Off

☒ Display the Mouse Keys icon on the taskbar

Now, with mouse keys active, you can press Numpad 2/4/6/8 to move down/left/right/up, respectively. You can tap the keys a bunch to do small nudges, which is where most of its use comes from in the run. Numpad 1/3/7/9 does diagonal movement, but you shouldn't use them, since your mouse's position has decimal values that you can't see (and that the game also can't see). Beware of pressing Numpad 5, because that's now mapped to left click.

Stage 1

Bjorn tips

- Super guide is generally best used to reach pegs that are otherwise a bit buried under a bunch of blue pegs.

- While not relevant for Any%, Super guide alters the way taps work, from a fixed step size to something that seems to depend on the surface the cannon is currently targeting.

1-1

This level is interesting since it's the only level where microzen is consistent: it always appears once you have 6 balls left. The way to make use of this is to go for quick pickoffs immediately after your first shot until you have 6 balls left, and then attack the big chunks of the level that were left after your first shots

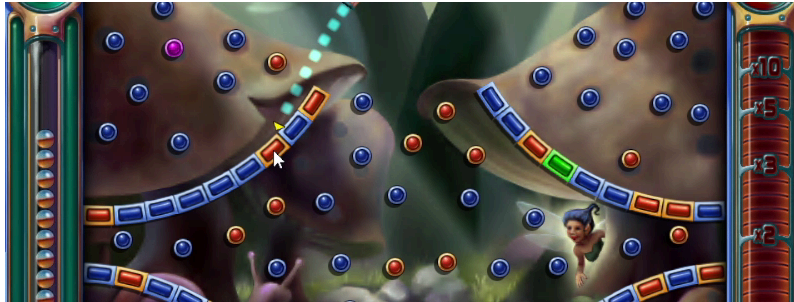
Choices for the first few shots vary quite a bit: some runners don't use strats, some use several pixel shots. I like the more balanced approach of a single improvised shot on the right side, and then doing (255, 471)



1-2

This is the first level where there's big slides available to us at the start of the level, so we obviously prefer generations that have more oranges on the slides. In this level, the slides will have about 9.4 oranges on average, so if you get fewer than 9, you'll probably want to reroll the layout.

Line up the tip of the trail to be just in front of the seam. This is somewhat finicky to get a fast variant on, so you'll wanna use the scroll wheel to line up the shot properly.



Then aim roughly here

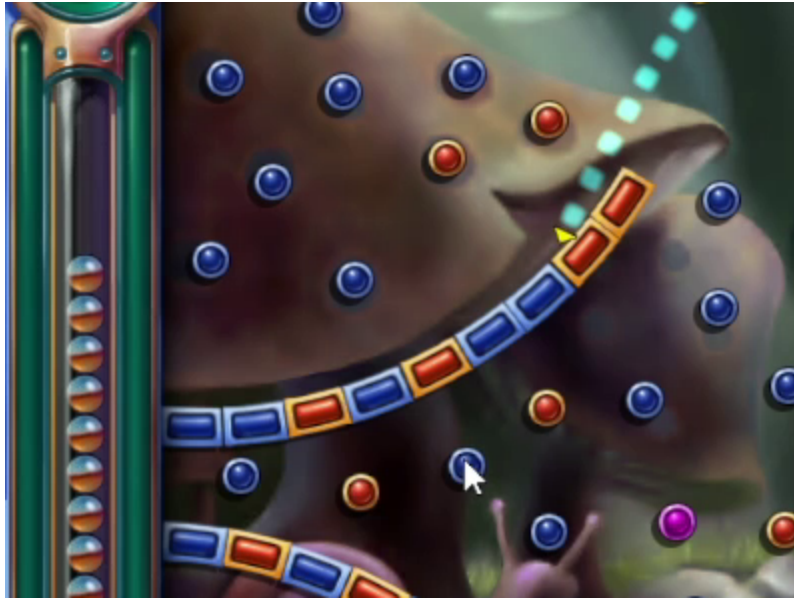


There's an alternative idea for the right side, which is to take the top side smoothly (so you don't collect the bottom slide), and then use R as a follow-up. This requires a certain peg to still be there when you go for it, though



These strats are pretty even in terms of speed, what matters more is how many oranges you get on the slides.

There is a more precise strat that is a little bit faster: Aim at the glint on (299, 379) and do one left-tap, timing +10:

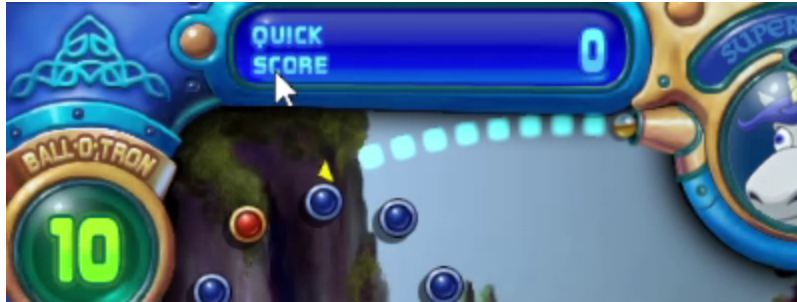


Then do $(564, 374) - 9$; note that you should still be able to see the tip of the cursor



1-3

As a beginner strat I would propose going for an edge shot here: go 2 on the topmost peg on the left, timing it on +9



If you're willing to try a hard pixel shot, then to start out you can either do this glint (586, 463)+6 or just yolo a shot down the middle-right.



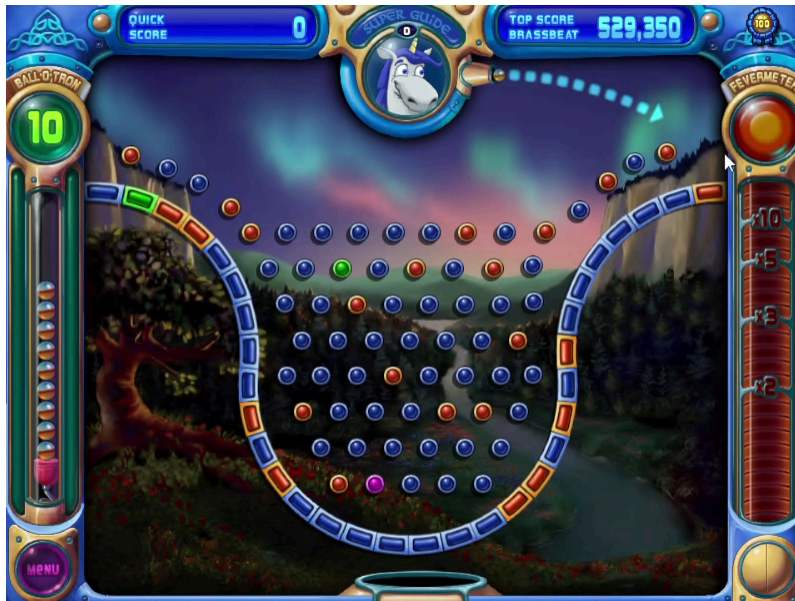
Now set up this pixel (88, 408), it's hard to hit but it doesn't really hurt if you miss it.



1-4

If you want to start with a free ball you can do R4+5.

You can aim on the outer bolt on either side to get a reasonably reliable slide. Pick the side with the most oranges to do first, and leave the other side for later.



1-5

Typically we start with L1+0. Then there's two commonly used continuations: one is to do (568, 349)+5



You can also do this glint twice $((664, 490)+4, \text{ then } +2)$



The second strat gets just under twice the amount of pegs in about 2.5x as long, so what you'll want to go for will most likely depend on your preferred grinding strat: if you're comfortable grinding the early levels a bit more for a strong start, then go for the first strat, and if you prefer to just get runs going with decent starts, then go for the second strat.

Stage 2

Jimmy tips

- Multiball is definitely one of the more situational powers. Consider whether it's actually going to be useful before going for one.
- Jimmy can mess up slide setups. Be sure to check the layout on these levels!

2-1

There's a fixed green right below the cannon on this level. To make use of it, you can either do R5+2 or simply aim somewhat below this glint.



2-2

Most strats on this level try to set up a direct slide on either side. First thing to mention is these slides are a bit tricky to collect. You'll want to go for an edge setup, 1 off of the main arc



R1-7 takes out a bit of the middle arc and lets you take the slide on the left.

This pixel ((403,430), although the y-value can be off by a few) gets the left slide immediately and lets you take the slide on the right in the next shot



2-3

The fact that multiball breaks up a slide is actually favourable here, since you can get through that layer immediately; I recommend just playing whatever layout you get, regardless of what happens with your strats.

For the pixel enjoyers you can do (698, 354)-9, (698, 354)-8,



and then the first shot of the alternative strat below. The average results of both strats are pretty similar, but in my experience this strat has a better chance of getting a good time, so I would favour this for runs because of how early on this level is.

If you don't get a green on the top slides, then start by aiming roughly here



There's a tight window to get an extra brick on the top-left, so I usually execute this as an imprecise edge shot, going 1 off the topmost peg.

Then from the right edge, scroll down until 4 off the topmost peg, pay attention to the three pegs you need to get this double slide.



If your layout (or your first shot) doesn't accommodate the double slide then you can either improvise something similar, or use R2+1, R2+3

The rows of pegs over each slide are good for preventing high bounces from the bricks, but it only works well if you can aim at these directly. You'll want to avoid comboing from above into these structures.

2-4

There is a big slide to get here: we set up with L4+0, and then go for (186, 465), 1 right from the glint



You can take the slide on the remaining outside piece directly afterwards.

We somewhat recently rediscovered this old strat that George would go for, and it actually provides a clean beginner alternative. First take out this brick, make sure that you're decently on the left side of it so it doesn't bounce back in



Then hit the now-exposed short side on the left



I'm not gonna tell you to reset for oranges since you'll likely have to reset for playable greens anyways (also it would be a lot to count out lmao).

2-5

Unfortunately this level doesn't allow much in terms of strats, it mostly comes down to practice and a bit of luck. As a beginner tip, R3+10 doesn't do a lot besides allowing you to start with 11 balls instead of 10.

The one tip I can give is that you can go for slides if there's a lot of oranges on the outer arcs. There's probably other ways to set these up, but I go for these:



Then once the middle rings are opened up a bit I'd recommend not going for super smooth slides there; having the inner rings unbroken and fully exposed tends to be a bad shape to play out.

Stage 3

Kat tips

- Just don't hit the greens. Please.
- If you do happen to get pyramid, then try to avoid having shots go to the corners without compromising your efficiency too much (this is hard, don't feel too bad if you get rekt)

3-1

This level tends to be slow and janky when played naturally, so we normally go for glints:
(638, 396)+9 is pretty fast on the right side



(58, 454) is good, but the correct altitude is hard to find. In particular, the height of the plunger depends on the amount of balls remaining.



There is however an easy way to do this with mouse keys: any pixel that is too low doesn't touch the same peg up top, so from such a position you can press up until you're on the correct pixel.

There's not a lot of strong tappable strats here because the shape of the level is just very annoying for this. There's been a handful of suggestions over time, but I would suggest doing two edge shots: 2 off the second peg on the left at -5



And 1 on the second peg on the right at +4



3-2

There is this really hard pixel shot (521, 242/243)-1 that we go for. If you want more time to set it up, you can do R1+10 first.



I look for the two light streaks below the spot.

Thankfully, if you don't want to do the pixel you can still be wicked: simply do R5 with this timing:

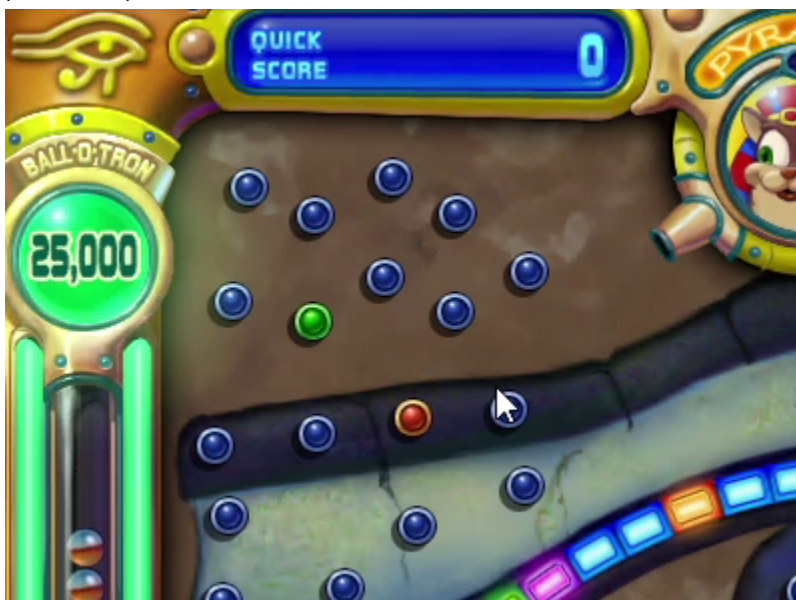


The window to get the full double slide here isn't that great, but it's not such a big deal if you miss it, since in that case you can just follow up with R6.

In terms of generation, you can benefit greatly from either having a lot of orange pegs on the bricks these strats collect (about 6 on average), or having few moving orange pegs (3.75 on average).

3-3

This level is basically an easier 3-2. The strats are simpler, and the moving elements are less annoying here. We do R3-6 to collect the top slide, but you shouldn't go for this bucket timing if you're gonna get a pyramid. Afterwards you can collect the second slide with either L9~0 or (245, 189)-10



Although the pixel shot is significantly faster (~5.5 seconds).

Whichever strat you go for, you get roughly 6.4 oranges on average from the slides.

3-4

The big elephant in the room here are obviously the moving canes. In general, we prefer to have shots bounce towards the center of the level so we can avoid interacting with these canes.

If you can't avoid staying near the sides of the level, then you'll wanna pay attention to the timing of your shots. Look out for some tricks you can do such as this



The current opener meta is to use a long sequence of glint shots: (100, 468), (100, 468)+1, (643, 346)-10, (268, 491)+3



That first shot can't be timed to land the bucket, it just needs to be somewhere from ~0 to +5 to not get affected by the canes.

A somewhat reasonable alternative is R+3, L1+1, L1+4, but you're taking a significant hit on survivability if you do this.

3-5

An easy, but somewhat slow way of getting the entire lower arc is to do L9, L9+9.

With a pixel shot you can do this in one shot. In fact, there's lots of options:



Options in here that runners have been using include (94, 545) and (79, 575)



The slide will contain ~6.7 oranges on average. There's definitely other significant factors in a good level generation, but rerolling based on the slide quality is still a solid rule of thumb.

The shot I like to go for as a follow up is a bit finicky and not even 100% consistent, but it is nice. Aim roughly here



Now as you scroll left, there is a point where the movement of the tip of the trail goes from mostly sideways to lifting up a bit. Now the second scroll that does this is where you want to shoot.

Stage 4

Splork tips

- For obvious reasons, Splork's effectiveness depends the most on green generation. A lot of levels will benefit from resetting for a good layout.
- More importantly, Splork has one of the highest scoring potentials. A key skill here is to maximise your odds of getting a 25k free ball. In general, if a green reaches a lot of oranges, you can

4-1

You'll want to get a decent green layout. I would say getting a reasonably positioned green on the right part of the curve is usually good enough.

To open up the top bit I normally use the "iceberg shot", (86, 388/389)



There's an alternative opener by going 1 off this nearby peg; it has a bit more variance in how well it opens up the flat part on the left.



You can do R3-1 or R4-6 afterwards either way, or before if you want some time to set up the pixel.

4-2

There's a trick we want to do later on in the level, so we'd rather not have greens on the underside of the top-left ring or on the arc below it. Outside of that, space blast just isn't amazingly useful in this level, so don't worry too much about green placement.

You can use (750, 250)-10 to clear out the arc on the top. The bucket timing is not 100% consistent, but I think it's good enough.



Another alternative is R8~0, R7, which is surprisingly only a few seconds slower than either pixel strat.

For the moving pegs you'll usually want to aim towards the right side, since it's easier to get inside the ring (on top of this, if you do get inside on the left side, you risk getting the crawl). If you did R1, there's a gap in what's left of the top arc for you to shoot through.

I should emphasise that getting clean bounces off of the big ring is the key factor in getting good times on this level. If you don't execute these well, a 0:50 can easily turn into a 1:10. In addition, I mentioned earlier that planning your shots to minimise fast-forwarding is important, and this becomes especially important in this level, due to how long the cycle of the ring takes (3.75 seconds when fast-forwarding!)

For the top-left ring, you can do L and then L4 to collect the entire ring in two shots. I like to save this ring for the end of the level, since the L4 slide is also a mostly guaranteed fast fever shot. If you're in a pickle near the end of the level, this trick can also give you a free ball from points.

4-3

One green is forced to spawn in the middle. Obviously some spots for the second green are terrible, but most are very playable.

Go slightly over the seams, side without green first



If the opportunity arises, try this for a slide. There's not really a precise setup I go for since there's a timing element anyways



4-4

You could do L4-0, but I think it leaves the bottom-left ring in a suboptimal condition, so there's somewhat of a trade-off there.

A key component of this level is making effective use of your space blast. Reset until you have both greens on or nearby one of the rings, and make sure you have a plan for when you are going for them.

How to deal with spinning rings (in general, there's some other levels where these come up):

In general, a ring that is still connected (i.e. has only one opening) is easier to combo well by shooting into it. This is a lot harder if the ring has multiple holes already. You will most likely need to do this if the ring has 3+ oranges as well as the top rings since they block too much of the level.

With a 1-wide opening you can just shoot into the hole and get decent coverage. There is no setup that clears out the ring with great consistency, though.

A 2-wide opening is fairly annoying and it's fairly hard to get the ball to "stick". I've had decent luck by shooting on the side of the hole moving away from you, but again, this isn't super consistent.

With a wider opening (3+) you can go for a slide. You should practise setting these up quickly.

That's a lot of words, so I made a demo play you can watch [here](#).

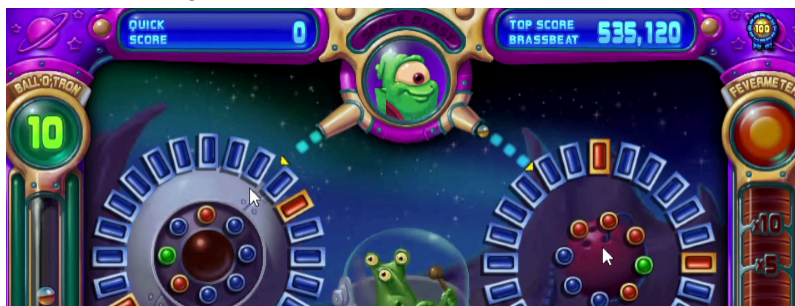
4-5

For both of the upper rings there's two ways we can enter them. Make sure you pick the option that suits your layout the best (this could be to do more than 1 on either side).

Outside stucks: L2, R. These are the ones I tend to go for most of the time. You'll want to get the timing to these a bit more precise, as there are consistently better variants to be had:



Inside stucks: put the pointer as deep in the slots as possible. On the right side, a good aim will show three segments on the pointer.



There is also a similar kind of shot for the lower ring, but its usefulness is a lot more situational



For all of these, the green pegs shown are the ones that are hit on spinning rings. Don't say no to a free orange.

Since you do have a lot of options, I don't think there's many ways to get a bad layout, so I tend to not check my greens layout on this level. There are still going to be cases where a green will just not do anything useful, but there's not really any hard rules I can give here.

Stage 5

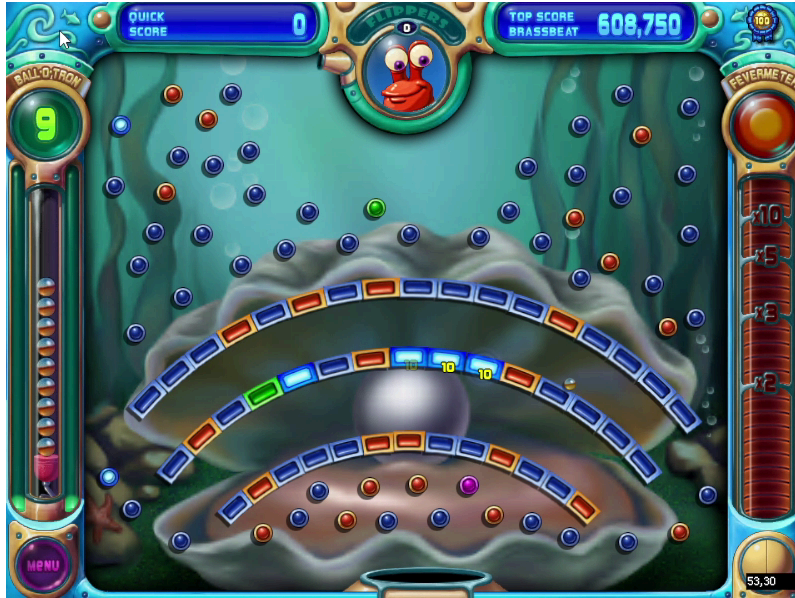
Claude Tips

- Usually it's not worth making "proper" use of the flippers. In most cases, flippers are kinda useless, and you want to dodge the ball when possible.
- It can be a good idea to allow bounces from the neutral position if there's stuff to get in the lower-middle part of the level

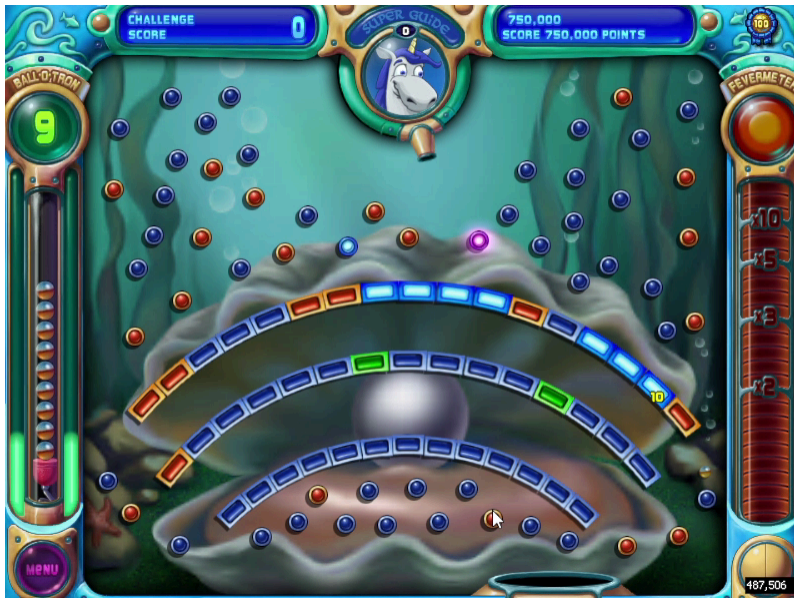
5-1

These two strats can be done in either order, but you need to not get flippers up until halfway whichever one goes second them to work. I think being able to do either order and recognizing which one works with the layout you've been given first is of greater value than the reduced setup time you get from doing the tap strat first.

L6-3 takes out the middle arc



And $(487, 507)+5$ takes out half of the top arc along with the entire bottom arc. The y-value is reasonably generous here.



The mid-shot images show which pegs need to be not green for either shot to work.

If you don't like pixel shots, do L6-3 first and then R1-2.

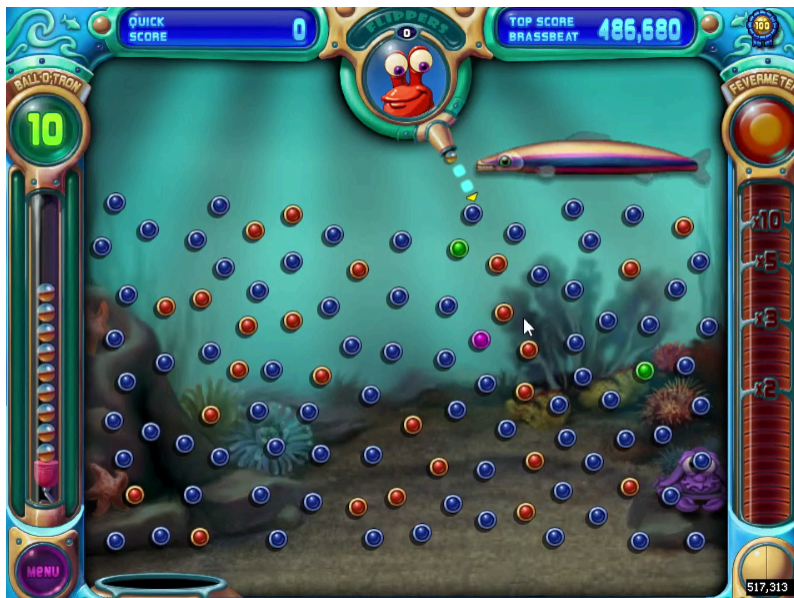
5-2

There's not much to say about this level. You can start off with L+5, which gets the bucket no matter if you get flippers, or with (298, 488)-1



If you get flippers with this pixel, then hold them upwards.

I typically do something like this to move the fish over, after stripping out the left side:

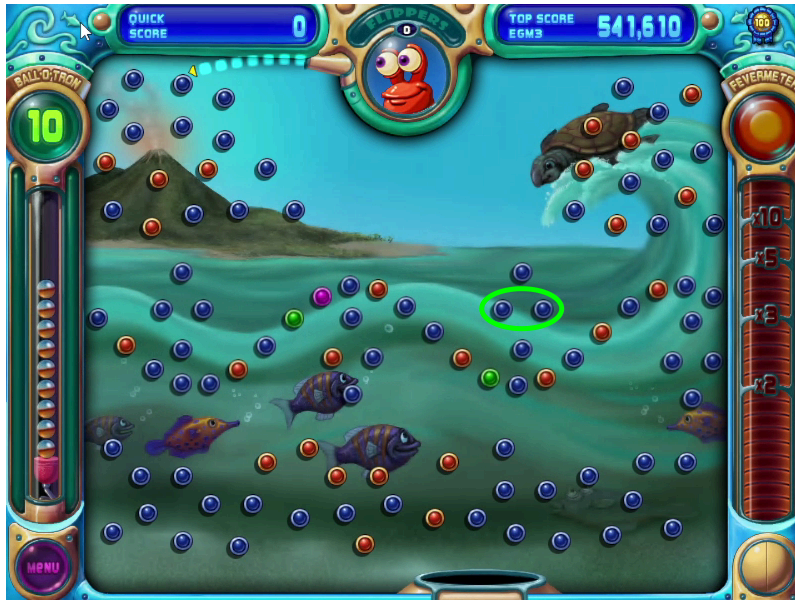


Beware however, that the first time you get flippers can displace oranges to another location, so if you move the fish over before getting flippers, you might have to move it over again.

5-3

L1 and R1 both get about half of the upper corners. You can wait for favourable conditions score-wise or just use them immediately. If you do, you can combo them with the upper diamonds if you time them right:

For L1:



For R1:



5-4

The strats we use here will clear most of the outer rings. We currently do (187, 309)+9



Followed by (424, 420). It's close to pixel-perfect, but not fully so.



The old strat of L1+4, R6-10 is still decent, but it is a little bit on the slow side.

You'll wanna try to get the ball to bounce between the inner rings and the middle peg rings. I typically follow up with something like this on the left



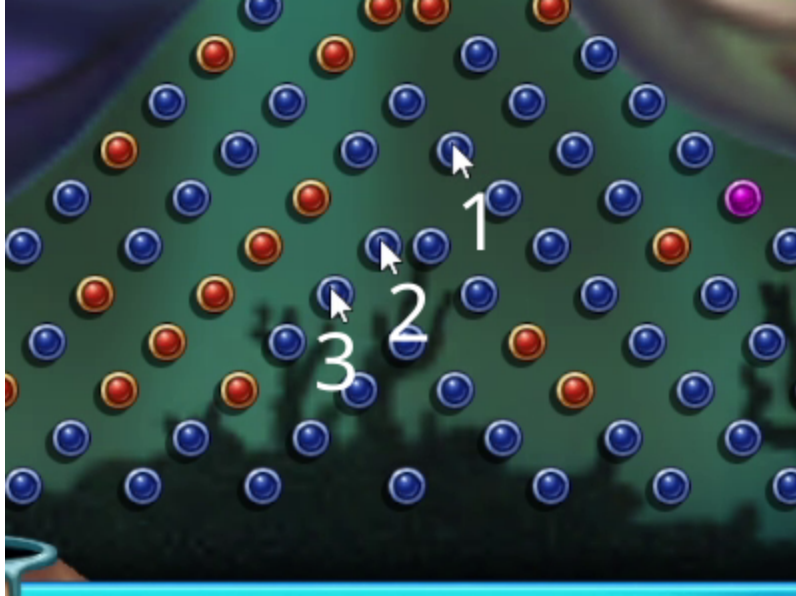
And something like this on the right



5-5

This is a really weird level; I end up changing my mind on what seems best to go for about every other week.

If you're fine doing a whole bunch of glints, you can do $(423, 372)+1$, $(387, 420)+1$, $(362, 444)\sim 0$



Otherwise, I'd suggest DR3+1, DL2-6. With this strat, if you're not going for the first bucket, then just yolo a shot that hits the middle peg and bounces diagonally downwards.

With the first strat, you can continue with whatever you think makes the most sense. The second strat is a bit more peculiar, in that you wanna first make use of the openings in the upper sides that appear:



Stage 6

Renfield Tips

- Spookyball is a bit slow, but can be good for safety in beginner speedruns. If you're good enough to survive these levels without it, it's better to avoid the greens.

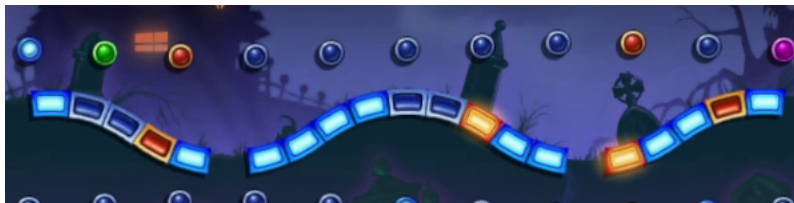
6-1

This pixel shot (363, 488), with roughly the shown timing (bucket goes left)



The perfect variant (3 slides) needs to have pixel-perfect aim and a favourable timing (at best you're aiming for a 3-frame window), but it's quite generous with other decent variants.

The top slide should look like this on the correct pixel; this is not timing-dependent, but the pixel directly underneath the correct one gives a similar-looking slide.



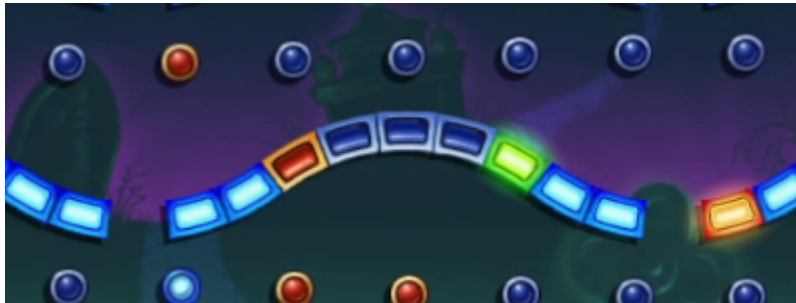
With the correct timing, the middle row should look like this:



If the middle row looks like this, your timing was too early. There's some individual frames that still get the triple slide, though.



If it looks like this, your timing was too late. These variants are usually not that favourable.



If you got a different case from these three, then you most likely were aiming one pixel too low.

6-2

There's not a lot of good strats here, so most runners, including me, just start with L+5. You could instead go for (48, 176)



Which hits 5 fixed oranges (because this level has 12 fixed oranges for some reason), but it also hits a fixed spookyball, so I don't think its potential is great.

In general, the order I do in the level is left side first, then the right side, and save the middle for last. Shots have a bit of a tendency to bounce from the sides to the middle, so opening up the middle first would make it likely for your shots later on to be less efficient.

6-3

We primarily go for strats that get work done on the sides of the level. An easy way to do this is L1+5, R7-2.

Instead of the left-side shot, we can also go for this glint (461, 484)+5



And instead of the right-side shot, we could also do this pixel $(785, 337)+10$



Although for this one it's genuinely hard to get the correct altitude. The shot you get if you're 1 too high is fine, but when you're 1 too low it really isn't.

Obviously, you'll need to get good at picking off the last few orange pegs when they're under the blockers. Most of the time you can get away with just a single bounce off of a blocker, so these are the ones you'll want to practise. There's also room to get a bit more creative with combinations of bounces and wallbounces.

6-4

I would suggest you start with $L \sim 10$ and then $(683, 398)-5$



These clear out a decent chunk of the left side, so you can try to finish off that side by shooting around the remaining wall section.

Unfortunately, this level does not have many good easy strats available. The best I can give you is to substitute the pixel shot for R7+10, but this usually means you have to break through the wall on both sides yourself.

6-5

Line up the upper corner of the tip of the guide to be just a tiny bit over the rim of this brick



The strat *can* work if you get a turn 1 spookyball, but it has to return into the left vase. Follow up with this bolt glint: (742, 165)



An alternative strat is to do L10~10, L+9 and then do the first shot shown. This requires you to do a bit more spookyball avoidance than with the other line, but it's a comparatively easy alternative that isn't much slower.

Given the shape of the level, a lot of tap strats will give decent results, so it's a good idea to know a handful of them so you can make a good choice depending on the layout you've been given. To recommend just one continuation for either, I would say L3 for the first strat and R1~0 for the second strat.

Stage 7

Tula Tips

- You'll usually want to play quite aggressively, and get the greens early for maximum yield. Beware though: it's easy to end up with a few oranges that are super buried. This isn't a major factor in any%, however.

7-1

Reset for at most one orange on the bottom row.

I prefer starting by shooting at the windmills like this:



These should bounce inwards if you do them properly.

L2+5 works well on the left side, but I would suggest keeping this shot for later once your multiplier is raised a bit.

7-2

R~10

Then either L+5 or this glint (483, 424), +8



After doing the glint, take the slides on the left and middle tulip (in that order)

If you need to clean up the right tulip the best way is probably to slide like this:



7-3

There's a few variants of this opener. I usually go for (494, 258). This isn't quite pixel-perfect; you're aiming for a 2x2 region, but the timing is rather finicky. Also note that the rings aren't equivalent: you get a much better window if you're lining up on the ring with the frog.



An easy alternative is to do R2 on the second bucket cycle. The timing is about halfway between -3 and -2. Make sure the rafts look like this when you fire:



The optimal timing has a chance of getting a smooth slide down the bottom; this is a bit precise, and I'd recommend using the cloth as a visual indicator.

The follow-up for this strat is L with the rings lined up like this:



Note the rightmost two bricks on the broken ring.

7-4

Start by aiming on the outside of this brick:



Then (192, 347) gets both of the horizontal lines in the middle.



If you don't want to do a pixel shot, you can do either (78, 594) or L4 to get at least one of those lines, but the rest of the level will still be fairly janky.



The best advice I can give you for the rest of the level is to take advantage of corner bounces to avoid slow shots on the remaining flat parts, given that you can aim these decently well.

7-5

Start with L2-7. There's slides that open up, which let you get easy buckets. Be sure to practise these.

To open up the right side, shoot like this:



Stage 8

Warren Tips

- Obviously this power is a bit inconsistent. Don't try to actively *avoid* the greens, but don't spend a shot going for one if you don't need it (especially since the spin animation takes 1.5 seconds).
- Hat is usually the strongest power, but especially in Any% you shouldn't underestimate the utility of getting an extra ball. All of Warren's levels are hard, so the extra ball is usually the least situational outcome.
- Remember you have to click the wheel when it appears. Be wary of the possibility of hitting a green while you're setting up the next shot.

8-1

The strat I go for uses two pixel shots:

(614, 192)-9 does this:



Then (446, 349)-0:



Unfortunately any beginner-friendly variant is a lot jankier and definitely a lot slower. Here's an older strat:

From downshot position, 1 on the left side of the center peg, +9:



Unfortunately this leaves a lot of the pegs under the eyes, so this can actually be rather tricky to play out.

Lastly, you could do this long sequence:

R5-6, R1-4, R5-7, R6-5

In any case, you need to be able to deal with the eyes, similarly to 4-4. I typically do this if I need to break one in:



8-2

This level is very janky in spite of being fully static. We generally start by opening up the ear parts on either side, but for both sides there's two options in use:

On the left, either L6-5 or $(204, 125)+2$. This shot allows for an easy mouse keys setup if you can find the correct latitude a few pixels higher up.



On the right, either R-6 or $R1+10, R\sim 10$. The second sequence sets up a few nice slides on the middle rings.



I can't find a clear difference in achieved times with any combination of strats, so I guess the choice will come mostly down to taste.

8-3

Always a very messy level. For score reasons I suggest to clear out the sides before moving to the middle, unless you roll hat, in that case break into the middle immediately.

You can use L8 and R7 to break into the sides; I prefer to just shoot like this though:



If a side ring has only 1-2 pegs or very many of them, then it's a good idea to take a more direct shot:



It will bounce out immediately, of course, but you can get good coverage on the next shot by shooting into the newly formed hole.

8-4

Do L-9, L3-6 for the left side, then $(643, 149)+1$:



That's definitely one of the pixels worth learning first. However, as a beginner alternative you can aim into this corner,



then scroll to 2 on the left brick (you'll notice when you're on that brick as opposed to the horizontal ones). Fire at -0 to catch the ball in a common bad variant.

8-5

To open the tops of the cards, I do L+10, L+2, $(578, 260)-7$:



A somewhat weaker, but easier strat is to do L5-8, R~0.

Stage 9

Cinderbottom Tips

- Since you can use the bucket for fireball bounces, most levels benefit from having prepared fireball strats.
 - A very strong and widely applicable strat is the sidewall bounce, which is essentially just L+10/R-0. If done correctly, these will get a big bounce from the bucket's sidewall. As wicked as it looks, it's not actually that hard compared to "regular" fireballs if you really need a specific bounce angle.
- In general, you should pay attention to the fact that the lid of the bucket is somewhat curved. This not only affects the angle of the bounce that you will get, but it also means that hitting the bucket on the front half will give you a higher bounce compared to hitting the back half.
- On many obstacle-type levels (in particular, every level in stage 9) your pace will depend a lot on how quickly you can get to the greens. You'll often have to restart the level if both greens are a bit buried, or have to adjust your first fireball to pick up the second.

9-1

If you use either of the two-shot strats below, you really need a layout that does not collect a fireball on the first shot.

This glint (110, 538)-2, then R-8.



With this strat many places can still have annoying oranges, so be sure to choose your fireballs properly.

Given the way the rest of the level lines up, the obvious downwards shot works well



or you can do right sidewall bounce.

Also a solid strategy is to use R+9 directly; you'll then need to do both sidewall bounces. If it happens that one green is in the middle, gaining access to it with the first fireball is critical. Pay attention to the resulting shape (this one's after just the left side):



Something to note if you're doing sidewall bounces (with either strat): you only get enough height to get a bit of the top-middle curve if you time the shot a bit late (whereas the usual window is fairly large).

A very nice beginner strat is simply L+7, R+3. Although slower, the main benefit of this strat is not having to pay much attention to fireball access. For fireballs, the considerations are roughly the same as with the glint.

9-2

There's two leading strategies that are roughly similar in potential but wildly different in execution.

The first starts by doing this pixel shot twice, (138, 341)-5 and then +7:



For the other strat we start with the middle, so make sure you have a reasonably accessible fireball.

Aim on this seam, +3. If it doesn't get the slide on the right, then you'll probably want to aim slightly further right.



Then once you have the fireball, line it up like this and shoot at -10



The result should be something that resembles the usual sidewall bounce. Do the same thing on the right side.

9-3

We usually play this level in a pretty straightforward manner: just get the fireballs (make sure you have one within reach immediately!) and do the standard sidewall bounces on both sides.

If you're a beginner, you may have a bit of trouble finding good combos to strip out the remainder of the level. If you feel like you need it, you can use R-0, L+10, L-6 before you get the first fireball.

9-4

This level can get janky quickly, so I prefer to have a plan and just stick to it:

Aim roughly here



Then take the slide in the top-left ring that should have opened up.
With the first fireball, aim here



The timing for the bucket is a bit precise; you'll want to be about halfway between +10 and ~10. For the second fireball there's not that many good regular options so I typically go for a kind of sidewall bounce down the middle – use -9 when going straight down and adjust accordingly.

You can of course do a mirrored version of this scheme, but I find you get better variants on the left side

If you're not comfortable with these precise fireballs, the best advice I can give you is to open up the top like the first image on both sides; then do both slides. You will have to improvise a bit with your fireballs, and as mentioned before, you'll have to deal with kind of a janky endgame, but the level shouldn't be as scary as it looks.

9-5

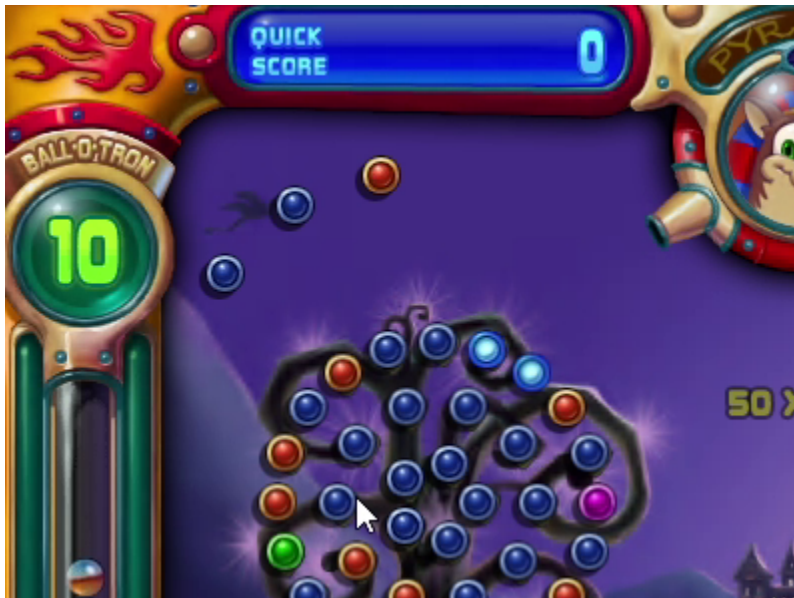
In general, the two fireballs we get in this level are not enough to open up the level in its entirety, so we start out by getting the ball stuck in either tree, which tends to clear about half of it.

On the right side you can start with R9-10, R1-5, although the level is perfectly playable with just a left side strat and fireballs on the right. I like to go for this fireball; note the timing of the bucket:



Which I think is the least likely to screw you over later in the level, so you have the second fireball free to go on the left side

On the left side there's two choices which seem pretty similar in speed: you can either do L2+2, L4-9; or you can start by taking out these two pegs first



Then you aim roughly here, or go 1 off the peg right above the opening



Stage 10

Hu Tips

- Zen ball works by simulating a bunch of shot angles nearby what you aimed for, and then picking the one with the highest score. This has a few consequences:
 - Hu *really* likes going for the point boost in particular since it has 50x base value. In many cases you'll be slightly dependent on where the point boost spawns when you get zen ball. If it spawns up high, aiming the other way typically works fine if the other side is better; this is less likely to work if the point boost spawns lower down.
 - If you're planning to shoot towards the point boost with zen ball, you'll usually benefit from aiming directly at the point boost (as opposed to taking a shot which *can* bounce into the point boost, which removes a bunch of high-scoring options that now can't compete with a variant that hits the point boost).
 - Style points do seem to count in Hu's calculations. In particular, you should watch out for long shots.
 - All of this may seem like Hu isn't all that great in speedruns, but on the flipside, oranges have a 10x base value and can raise the multiplier, so in particular Hu is good at clearing out dense regions of oranges.
 - If you use the zen ball with your aim maxed out on either side, the simulation will only have half of its options available. If a tap strat you're going for gets interrupted by a zen ball (and you're opting not to reset), then you should shoot somewhere else.
- In terms of survivability of the level (all of these levels are hard), it's not such a huge deal when you use the zen balls, as long as it's not within the first few shots of the level, as

your scoring potential starts out rather low. However, the choices Hu goes for tend to be faster the later in the level you get the zen ball.

- In particular, Hu is good at finding you a winner if there's only a few oranges left, so saving a zen ball for the very end is a good way to save a shot or two.

10-1

You can start with L7+6; this gives you time to set up the next pixel shot.

There are five pegs that are always blocked by the cane and three of those pegs are forced to be orange:



We can use (567, 487) to pick these off at the start. It's best timed with the cane, but that's synced with the bucket, so the timing corresponds to halfway between -1 and -0. This strat leaves just the one peg on the right in the box, which *can* be orange, so you could consider resetting if you get that.

Since the top-right area is really annoying I like to shoot there with the first zen ball. This however flies in the face of every Hu advice I've given so far, so as an alternative you can go 4 on the topmost peg on the right to open this area up without a zen ball.

10-2

I don't like making a hole in the outer ring immediately, instead I just work a bit on the side until a hole appears naturally.

There are 3 layers you can get a slide in, and the oranges are concentrated around the two on the inside. You should make sure to work your way through the rings without using the zen balls immediately, so you can access the innermost ring with the second zen ball at the very least..

10-3

There is a peg on the left of the portal exit that can be really hard to collect late on. In theory you could reset if this peg is orange, but the strats we use do collect this peg. This glint (485, 397)-6 gets a lot in one shot, and will often give you a turn 1 scoreball even:



Alternatively, you can do R4+8, R-0.

To sweep out the remaining pegs on the right efficiently you have to get a good feel for what the direct paths through the portals look like. In particular, the glint strat leaves a peg which is a bit weird: to get it directly you need to do a wallbounce into the right portal



Some of the pegs on the left part of the level are under the “shadow” of the middle portal and also need a wallbounce to be hit directly.



10-4

We use L+9, L-9 to open up the left side. For the right side there are two possible strats: an easy variant is to do R16-9, which you can treat as 3 on the topmost peg. There is also a pixel strat, which is (760, 211)-10:



The main advantage of the pixel strat is that you can use R-3 as a continuation. With the other strat it's still a good idea to shoot in the right pocket next, since it tends to be a bit of a distraction for Hu without allowing him to actually find better shots.

10-5

There are not really any promises of consistency here, just some general ideas that maybe give you a better win rate at this level. For reference, judging from my livesplit files, my win rate at this level is about 80%.

For Any%, one of the main things to consider is just how unreliable Hu can be on this level; don't expect to get the 25k free ball unless you're starting at x3 multiplier.

Most runners employ a strategy that has since been dubbed "brian strats": simply hit the inside of one of the helices, allowing the ball to make long bounces between them. This may seem like a waste of time, but the level is hard enough where doing something slow to boost your win rate can save time when cleaning up the level.

Because of the peculiarities with Hu on this level I prefer a different approach, which is to shoot along the outside of one helix at first, and then through the holes that appear on the next few shots. If you get a bad point boost spawn on the first zen ball, you can shoot outside of the other helix.

Stage 11

- One very minor thing that you want to pay attention to is that the "continue" button at the end of the level is in a different position during this stage:



11-1

Basically everyone uses **Cinderbottom** on this level.

There is a reasonably simple-to-execute beginner strat available in L, L3+0, DL2-4, R+8. I would recommend this strat to be one of the first you should switch out to the pixel shot:

First you set up with this shot



It's not precise at all, but there are two variants you can get here, which depends on the order in which the ball hits the bottom two pegs of those strands



If you find you're getting the bad variant often, then try a few runs where you aim at a different spot to set this shot up.

Then you do (316, 209):



Afterwards you can take the slide on the right.

Unlike the actual cinder levels there's not a real trick to the fireballs. Getting access to the second fireball is the most important thing; then your focus should go to the bottom two short strands, the pegs there are hard to get naturally.

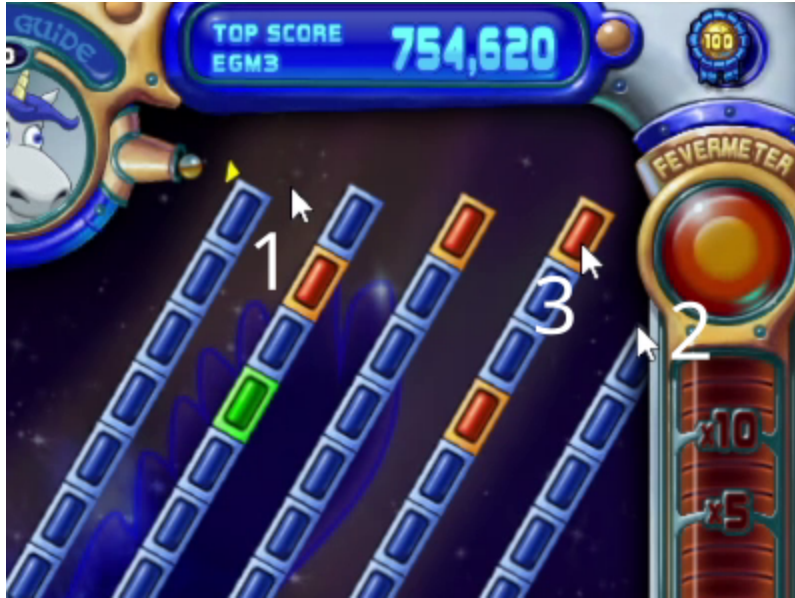
11-2

This is another obvious **Cinderbottom** level.

In terms of basic strats you can do R~0, R-3 to get an easy slide on the right; on the left there's a few reasonable options: L4+8 gets the third slide, L8~10 gets the second slide and L9+3 gets the first slide.

The currently leading idea is to get as many of the slides as possible on the right side; there's currently two pixel shot sequences in use:

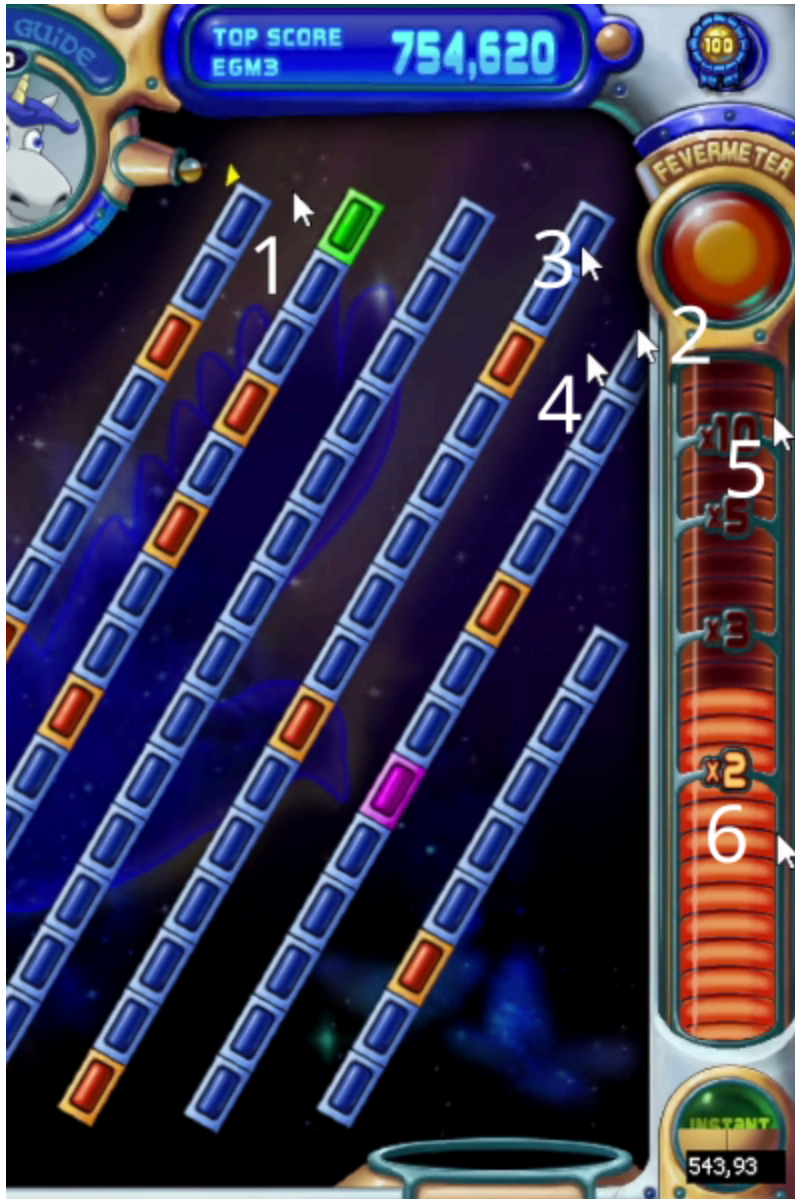
One strat goes (542,93)-8, (715,162)-9, (687, 121)-10, R-3



The two remaining lines can be mostly obtained with a sidewall bounce on the right. For this strat it's fairly important to make sure you don't get a fireball too early. You can save the first shot until later, but the others have to be in that order.

The other strat has quite a few more shots:

(542,93)-8, (715,161)-9, (686,120)~10, (690,173)~10, (783,205)+5, (785,414)-3



Both fireballs go to the left side here, so you can take the fireballs whenever you want.

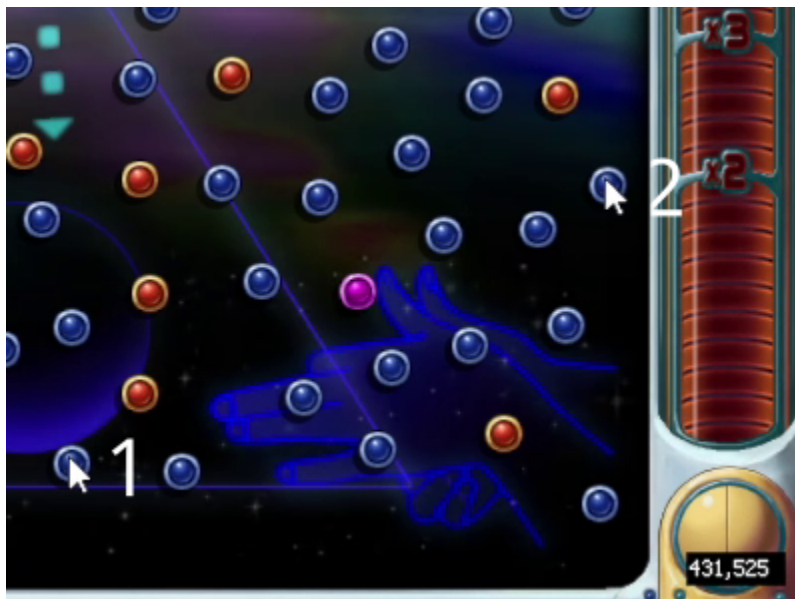
In whatever approach you take, you usually want to line up the fireball so that it carves through a line after bouncing off the wall:



11-3

Most people use **Hu** here. I would say **Tula** works well with the pixel strat below, but not with the downshot strat.

We need a pretty long strat sequence here because the level is just too janky. If you're playing Hu with either strat you'll wanna be able to play out the entire strat before getting a Zen ball. The main line goes (431, 525)+0, (699, 386)-10,



and then (234, 100) with one left tap.



That last shot goes through the portal, so you'll want to time it with the UFO (not the bucket) at about +7

Slightly more beginner friendly is this downshot sequence: DL5+5, DL4-3, DL2-3, DR1~0. Compared to the other strat, this leaves the top areas unaffected, which can backfire a bit from getting slow shots later on.

Timing your shots through the UFO is a fairly unique skill for this game, but one you'll want to practise nonetheless. Being bad at cleaning up the level can easily cost you 15+ seconds.

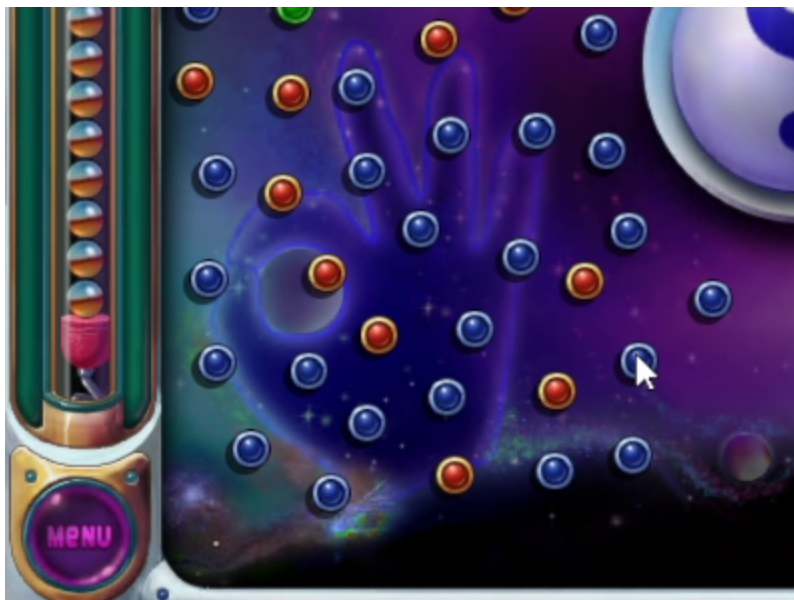
11-4

For master choice the current meta is split right down the middle, with about half of top runners using **Bjorn** and half using **Tula**. Bjorn is definitely the more beginner-friendly, though.

The strats for this level are mostly geared towards clearing out the junk in the lower middle of the level. An easy way to do this is L9+3, R6~0, but I'd recommend doing (641, 417)-6 once you're comfortable with pixel shots



Some runners combine this with $(315, 474)+10$,



but I don't like the shape that this leaves on the top-left so I tend to just yolo a shot like this:



which has a good chance of getting some clearance in the top-left part of the level.

You'll want to have a plan to get hits in the upper areas if you need to; for the left side I put the tail of the cursor on this star near the orb:

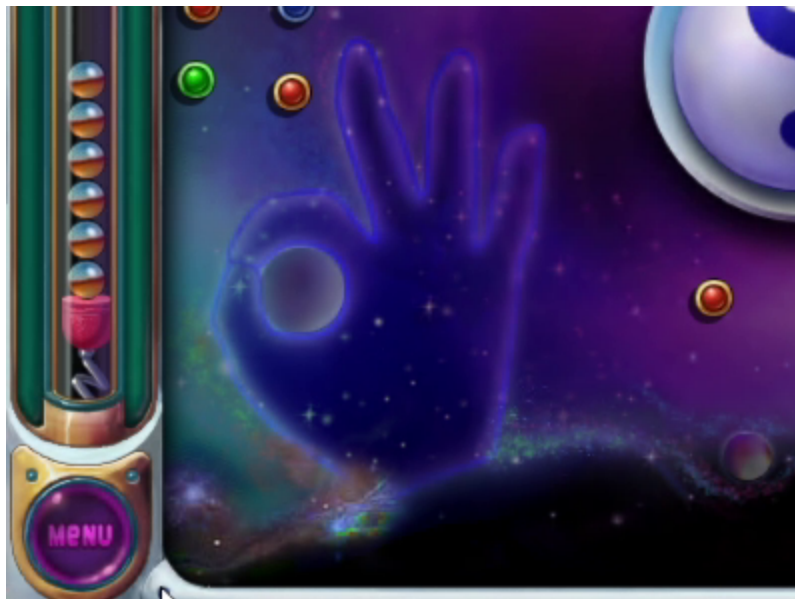


For the right side I put the tip of the cursor on the left side of this star



For the upper middle parts of the level it's not super necessary to have planned shots, but you'll want to have a decent feel for bouncing off of the orb.

As a final note: the strat leaves one very annoying peg high up below the orb; you could simply reset if this peg is orange, or you could use this pixel shot (77, 591)



11-5

There's a choice to make here: with **Splork** strat this is probably the easiest level in this run; **Cinderbottom** strat is ~15 seconds faster on average, but then this is probably the hardest level of the run.

The plan with Splork is very straightforward, just reset until both greens are in the helix, and use the blasts to clear out most of the helix. The main thing to pay attention to is that you hit the blasts fairly centred.

With Cinderbottom you'll want to get a fireball immediately, then do this somewhat precise shot



Pay attention to the bucket here; you have about an 8 frame window to hit it. I use the background stars on its left to line it up (unfortunately these don't show up well in the image).

Usually the second green is in the helix, so you'll wanna chain the greens together with the first fireball. For the second shot, there's a chance you can get away with just shooting at the remainder of the helix without bouncing, but usually you have to go for the same bounce as the first. You'll want to pay attention to the cycles: the "bucket + helix" system loops back around after 24 seconds, or 4 full bucket cycles. What this means is with back-to-back fireballs, you should shoot them 2 bucket cycles apart, so you hit the other half of the helix. If you didn't manage to chain the fireballs together, you'll have to count out to some multiple of 4 bucket cycles from that first available timing.

Beware that the cinder strat is very risky. If you hit a shot too early and you get the diagonal bounce, you will probably lose ~20 seconds, and if you hit it too late and you get the outwards bounce, you'll most likely have to reset the level.

Version History

2024-07-24 - Added strat for 2-4

2023-09-14 - Original version published