Pokémon Organized Play Ratings and Rankings Frequently Asked Questions

What is my Rating?
Pokémon Organized Play tracks the ratings of all of the players that participate in sanctioned tournaments. Players can use the ratings to measure their success at tournaments, their improvements as a player, and to compare their play during the current tournament season against their highest ratings of previous seasons.

Each time you win a match at a sanctioned tournament, your rating goes up. Each time you lose such a match, your rating goes down. All new players start with a Rating of 1600 when they play in their first sanctioned tournament match of the year. Ratings rarely ever rise higher than 2000 or lower than 1400.

Pokémon Organized Play only issues rating points for Premier Events, such as City Championships, or Battle Roads.

What is my Ranking?
Your ranking is determined by comparing your rating against the ratings of others in your area. If you are ranked second in your state, for instance, only one other person in your state has more rating points than you.

What is the difference between my Rating and my Ranking?
Rankings are referred to when people want to talk about how they’re doing in relation to other players in their area. A player’s rating gives a good approximation on how difficult that player would be to beat.

Why is my name not on the Rankings page?
If a player has not chosen to allow their ratings and rankings to be viewed online, their ratings will not be applied to any of their area’s rankings. You can set your ratings and rankings preferences by logging into your “Pokémon Trainer” account. If you are under the age of consent, one of your parents will have to update your preferences for you.

If you play against someone who doesn’t want their information posted online in a sanctioned PLAY! Pokémon Tournament, you’ll still gain (or lose) rating points normally.

How does my rating change?
Your rating will go up (or down) after the tournament that you played in has been uploaded to our website. The website calculates your new rating after each and every match you play. After you’re first few tournaments, you may see a rapid increase in your rating as you earn ratings points from the higher-rated players you defeat in tournaments. Over time, you’ll probably find that your rating doesn’t change too much, as you will have raised your ratings to about the same level as other players at your skill level.
How does my rating change after each match?

There are two parts to determining how many points you will win or lose in a match: Win Expectancy (which is based on comparing your rating to your opponent’s), and the number of points won or lost (which we’ll call the ‘stake’), which is based on the Win Expectancy.

*Win Expectancy:*

The formula below is used to figure out your expected percentage chance to defeat your opponent:

\[
1 / [1 + 10 ^ {((Opponent’s Rating - Your Rating) / 400)}]
\]

It looks complicated, but it boils down to this: if your rating is even with your opponent’s, the Win Expectancy is 50%. Players with high ratings are ‘expected’ to beat players with lower ratings more often than they lose to those players, so your Win Expectancy goes up if you are rated higher than your opponent, and down if you are rated lower.

*What’s at Stake?*

Second, we figure out how many points you should gain if you win. This amount is based on the Win Expectancy, the Outcome of the match, and what is called the ‘k-value’.

The k-value represents the competition level of the tournament, with larger numbers reflecting higher levels of competition.

The ‘Outcome’ of the match is 1 if you win and 0 if you lose. The winner of the match will gain points equal to the stake and the loser will lose the same number of points.

The Stake can be calculated with this formula:

\[
Stake = k\text{-value} \times (Outcome - \text{Win Expectancy})
\]

Again, the formula may look complicated, but it can easily be explained. The stake is smaller if the higher rated player wins the match - they were expected to win, after all. If the underdog wins the match, the stake is larger to reward the achievement.

Here are a few sample results of the formulas above, using a k-value of 32.

<table>
<thead>
<tr>
<th>Difference in Ratings</th>
<th>Win Expectancy for higher rated player</th>
<th>Stake if higher rated player Wins</th>
<th>Stake if higher rated player Loses</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 points - Even Ratings</td>
<td>50.00%</td>
<td>16.00</td>
<td>16.00</td>
</tr>
<tr>
<td>20 points</td>
<td>52.88%</td>
<td>15.08</td>
<td>16.92</td>
</tr>
<tr>
<td>40 points</td>
<td>55.73%</td>
<td>14.17</td>
<td>17.83</td>
</tr>
<tr>
<td>60 points</td>
<td>58.55%</td>
<td>13.26</td>
<td>18.74</td>
</tr>
<tr>
<td>80 points</td>
<td>61.31%</td>
<td>12.38</td>
<td>19.62</td>
</tr>
<tr>
<td>100 points</td>
<td>64.01%</td>
<td>11.52</td>
<td>20.48</td>
</tr>
<tr>
<td>120 points</td>
<td>66.61%</td>
<td>10.68</td>
<td>10.68</td>
</tr>
<tr>
<td>140 points</td>
<td>69.12%</td>
<td>9.88</td>
<td>22.12</td>
</tr>
</tbody>
</table>
It’s easy to see a general pattern - on average, a 20 point difference in ratings means about a one point difference in the stake, which is larger if the higher rated player loses than it is if that player wins.

**Why does my rating sometimes change when I haven’t been playing?**

Each player’s current ratings are recalculated every day to make sure that the ratings and rankings online are up-to-date. First, all match results are sorted by tournament date & time, and then by each round of the tournament. Then, ratings are calculated for everyone, one match after another, through every match that player has ever played.

If a Tournament Organizer sends in results some time after the tournament, and you’ve played in another event since, the database will insert the matches from the late-reported event where they belong. If any of your opponents have experienced this same issue, the change in their rating will affect yours as well.

If you play in an event and do not see any change to your rating, you may want to check in with your Tournament Organizer to make sure that the results of the event were reported on time and correctly.

**Why did I receive zero (0) points for a match?**

The most frequent reason that a player would receive no rating points for a match is due to cross-age division matches in an Age Modified tournament. Over the years, POP has found that a significant portion of players who play a match against an opponent in an age group above their own lose that match. This means that even a highly rated Junior player is at a severe ratings risk and disadvantage when playing against a Senior player. To help maintain the integrity of the ratings system, cross-age division matches don’t count toward either player’s rating.

In addition to cross-age division matches, players who receive a bye or forced loss (due to late arrival to an event) do not gain or lose rating points for those rounds, as no match was played.

**Why does Pokémon Organized Play choose this method for ratings?**

This system is used by many games and sports and is widely popular in different kinds of organized play. The original formula was championed by Professor Arpad Elo for use in calculating chess ratings. There are several variant forms of this formula in use today that address the unique characteristics for a range of games.

**How often does Pokémon Organized Play reset players’ ratings?**

After the World Championships each year, Pokémon Organized Play will perform a final ratings calculation for all of the events that have taken place during that Tournament Season including the

<table>
<thead>
<tr>
<th>Points</th>
<th>Percentage</th>
<th>Rating</th>
<th>Rating Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>160</td>
<td>71.53%</td>
<td>9.11</td>
<td>22.89</td>
</tr>
<tr>
<td>180</td>
<td>73.81%</td>
<td>8.38</td>
<td>23.62</td>
</tr>
<tr>
<td>200</td>
<td>75.97%</td>
<td>7.69</td>
<td>24.31</td>
</tr>
</tbody>
</table>
World Championships. The final results will be published on our website for posterity. You’ll be able to come back and view your previous year’s rating and ranking any time you wish, but it will remain static.

By resetting player ratings and rankings each year, we hope to keep our tournament environment more vibrant and alive by giving everyone an equal starting point for the year. Good players will rise up in rankings quickly, but less experienced players should also feel as though they are starting on an ‘equal footing’ with other players.

This also means that really good players cannot sit on their ratings from one year to the next. In other systems, if a player does not play, their ratings do not change. A player who was ranked #1 in the world with a 2100 rating for the previous year had a very good chance of remaining #1 the following year, even if they choose not to play for the entire year.

POP believes that system is unfair to active players, who are attempting to improve their rankings. It is on these merits that we have chosen to reset ratings and rankings at the end of each tournament season.