

World Para Swimming Point Scores 2023 – Long Course Events

Method to calculate the points for a specific performance is the Gompertz function:

$$G(p, a, b, c) = q = ae^{-e^{\frac{b-c}{p}}}$$

To calculate the required performance for given points, the inverse Gompertz function is

$$G^{-1}(q, a, b, c) = p = c / \left(b - \ln \left(\ln \left(\frac{a}{q} \right) \right) \right)$$

with performance p (in seconds), points q , and parameters a, b, c as given in the table below:

Senior Event	Class	a	b (Men)	c (Men)	b (Women)	c (Women)
50 m Freestyle	S1	1200	6.148153	510.898	5.573672	466.403
	S2	1200	6.148153	434.905	5.573672	430.733
	S3	1200	6.148153	333.857	5.573672	347.04
	S4	1200	6.148153	288.401	5.573672	266.016
	S5	1200	6.148153	246.137	5.573672	259.858
	S6	1200	6.148153	227.156	5.573672	238.599
	S7	1200	6.148153	217.716	5.573672	232.548
	S8	1200	6.148153	206.791	5.573672	219.975
	S9	1200	6.148153	198.251	5.573672	207.892
	S10	1200	6.148153	187.698	5.573672	199.619
	S11	1200	6.148153	199.277	5.573672	210.842
	S12	1200	6.148153	182.366	5.573672	190.251
	S13	1200	6.148153	183.115	5.573672	191.79
100 m Freestyle	S1	1200	6.181036	1084.407	5.628484	1008.179
	S2	1200	6.181036	958.645	5.628484	945.08
	S3	1200	6.181036	749.041	5.628484	665.457
	S4	1200	6.181036	628.871	5.628484	590.867
	S5	1200	6.181036	544.059	5.628484	560.096
	S6	1200	6.181036	505.965	5.628484	524.254
	S7	1200	6.181036	478.445	5.628484	506.221
	S8	1200	6.181036	449.734	5.628484	479.394
	S9	1200	6.181036	430.451	5.628484	453.936
	S10	1200	6.181036	410.169	5.628484	432.457
	S11	1200	6.181036	443.317	5.628484	468.925
	S12	1200	6.181036	399.555	5.628484	414.598
	S13	1200	6.181036	399.418	5.628484	419.845
S14	1200	6.181036	411.905	5.628484	429.869	
200 m Freestyle	S1	1200	5.926605	2150.479	5.475363	2017.467
	S2	1200	5.926605	1834.814	5.475363	2024.95
	S3	1200	5.926605	1460.403	5.475363	1479.54
	S4	1200	5.926605	1308.478	5.475363	1225.62
	S5	1200	5.926605	1150.597	5.475363	1167.331
	S6	1200	5.926605	1122.135	5.475363	1093.998

	S7	1200	5.926605	1030.555	5.475363	1095.642
	S8	1200	5.926605	968.307	5.475363	1002.503
	S9	1200	5.926605	919.952	5.475363	981.673
	S10	1200	5.926605	869.882	5.475363	911.7
	S11	1200	5.926605	957.914	5.475363	1012.564
	S12	1200	5.926605	912.76	5.475363	891.633
	S13	1200	5.926605	856.825	5.475363	917.488
	S14	1200	5.926605	872.751	5.475363	911.273
400 m Freestyle	S6	1200	7.020608	2583.61	7.189862	2792.793
	S7	1200	7.020608	2417.222	7.189862	2705.746
	S8	1200	7.020608	2274.28	7.189862	2557.584
	S9	1200	7.020608	2177.952	7.189862	2476.008
	S10	1200	7.020608	2081.813	7.189862	2379.875
	S11	1200	7.020608	2325.033	7.189862	2626.544
	S12	1200	7.020608	2110.523	7.189862	2343.588
	S13	1200	7.020608	2062.872	7.189862	2322.145
	S14	1200	7.020608	2177.757	7.189862	2398.823
800 m Freestyle	S6	1200	8.244965	6301.601	9.425149	6892.989
	S7	1200	8.244965	5770.094	9.425149	7352.215
	S8	1200	8.244965	5159.956	9.425149	6842.269
	S9	1200	8.244965	5123.952	9.425149	6229.651
	S10	1200	8.244965	5056.471	9.425149	6292.871
	S11	1200	8.244965	5713.645	9.425149	6957.902
	S12	1200	8.244965	5442.808	9.425149	5994.087
	S13	1200	8.244965	5093.29	9.425149	6129.073
	S14	1200	8.244965	5004.581	9.425149	6357.743
1500 m Freestyle	S6	1200	7.615153	12225.01	10.23331	17988.631
	S7	1200	7.615153	9944.32	10.23331	14501.29
	S8	1200	7.615153	9931.136	10.23331	14720
	S9	1200	7.615153	9318.76	10.23331	13716.62
	S10	1200	7.615153	8638.018	10.23331	13866.24
	S11	1200	7.615153	10641.101	10.23331	15486.278
	S12	1200	7.615153	10594.516	10.23331	12500.426
	S13	1200	7.615153	9180.727	10.23331	13022.715
	S14	1200	7.615153	9123.969	10.23331	12927.44
50 m Backstroke	S1	1200	4.440263	394.857	4.447733	386.875
	S2	1200	4.440263	324.093	4.447733	356.519
	S3	1200	4.440263	278.735	4.447733	317.552
	S4	1200	4.440263	255.126	4.447733	285.38
	S5	1200	4.440263	219.711	4.447733	257.124
	S6	1200	4.440263	216.025	4.447733	234.593
	S7	1200	4.440263	202.871	4.447733	230.579
	S8	1200	4.440263	186.184	4.447733	222.271
	S9	1200	4.440263	179.511	4.447733	199.636
	S10	1200	4.440263	168.959	4.447733	190.979

	S11	1200	4.440263	186.865	4.447733	212.244
	S12	1200	4.440263	167.57	4.447733	192.721
	S13	1200	4.440263	161.932	4.447733	191.695
100 m Backstroke	S1	1200	6.196311	1044.759	6.113663	1057.426
	S2	1200	6.196311	861.942	6.113663	977.946
	S3	1200	6.196311	769.127	6.113663	989.663
	S4	1200	6.196311	723.767	6.113663	815.94
	S5	1200	6.196311	667.37	6.113663	711.089
	S6	1200	6.196311	577.748	6.113663	633.58
	S7	1200	6.196311	544.154	6.113663	620.618
	S8	1200	6.196311	518.475	6.113663	596.125
	S9	1200	6.196311	488.175	6.113663	553.331
	S10	1200	6.196311	468.689	6.113663	520.039
	S11	1200	6.196311	511.203	6.113663	583.767
	S12	1200	6.196311	445.785	6.113663	511.838
	S13	1200	6.196311	438.039	6.113663	503.693
	S14	1200	6.196311	473.723	6.113663	520.859
200 m Backstroke	S6	1200	7.739317	1494.038	7.62791	1484.737
	S7	1200	7.739317	1470.588	7.62791	1486.431
	S8	1200	7.739317	1344.371	7.62791	1550.211
	S9	1200	7.739317	1281.39	7.62791	1418.612
	S10	1200	7.739317	1220.389	7.62791	1353.116
	S11	1200	7.739317	1373.346	7.62791	1558.253
	S12	1200	7.739317	1244.563	7.62791	1321.723
	S13	1200	7.739317	1220.865	7.62791	1393.825
	S14	1200	7.739317	1248.039	7.62791	1374.192
50 m Breaststroke	SB1	1200	4.933359	536.279	4.532388	558.399
	SB2	1200	4.933359	326.287	4.532388	415.045
	SB3	1200	4.933359	298.709	4.532388	330.707
	SB4	1200	4.933359	274.271	4.532388	285.049
	SB5	1200	4.933359	267.437	4.532388	270.359
	SB6	1200	4.933359	233.89	4.532388	262.357
	SB7	1200	4.933359	229.632	4.532388	264.625
	SB8	1200	4.933359	207.083	4.532388	225.847
	SB9	1200	4.933359	200.818	4.532388	212.075
	SB11	1200	4.933359	213.031	4.532388	227.219
	SB12	1200	4.933359	197.085	4.532388	210.996
	SB13	1200	4.933359	193.101	4.532388	219.146
100 m Breaststroke	SB1	1200	5.102847	1091.71	5.089975	1433.714
	SB2	1200	5.102847	858.458	5.089975	1118.642
	SB3	1200	5.102847	736.905	5.089975	872.595
	SB4	1200	5.102847	620.999	5.089975	702.406
	SB5	1200	5.102847	608.741	5.089975	668.997
	SB6	1200	5.102847	528.871	5.089975	630.907
	SB7	1200	5.102847	519.877	5.089975	602.633

	SB8	1200	5.102847	470.962	5.089975	538.401
	SB9	1200	5.102847	447.822	5.089975	518.789
	SB11	1200	5.102847	489.461	5.089975	560.957
	SB12	1200	5.102847	436.179	5.089975	502.49
	SB13	1200	5.102847	429.829	5.089975	504.741
	SB14	1200	5.102847	447.481	5.089975	518.531
200 m Breaststroke	SB4	1200	7.38426	1811.694	8.455629	2124.893
	SB5	1200	7.38426	1798.715	8.455629	2179.228
	SB6	1200	7.38426	1570.72	8.455629	2007.147
	SB7	1200	7.38426	1506.975	8.455629	1904.162
	SB8	1200	7.38426	1316.731	8.455629	1764.38
	SB9	1200	7.38426	1296.885	8.455629	1695.77
	SB11	1200	7.38426	1488.714	8.455629	1917.687
	SB12	1200	7.38426	1388.979	8.455629	1633.373
	SB13	1200	7.38426	1271.221	8.455629	1627.968
	SB14	1200	7.38426	1287.108	8.455629	1724.079
50 m Butterfly	S1	1200	5.035914	795.948	4.475842	483.803
	S2	1200	5.035914	368.556	4.475842	366.527
	S3	1200	5.035914	319.494	4.475842	340.676
	S4	1200	5.035914	257.442	4.475842	255.638
	S5	1200	5.035914	221.985	4.475842	251.786
	S6	1200	5.035914	203.57	4.475842	208.619
	S7	1200	5.035914	198.397	4.475842	203.571
	S8	1200	5.035914	184.657	4.475842	198.251
	S9	1200	5.035914	177.873	4.475842	181.486
	S10	1200	5.035914	170.143	4.475842	177.914
	S11	1200	5.035914	176.545	4.475842	201.333
	S12	1200	5.035914	166.702	4.475842	175.249
	S13	1200	5.035914	173.564	4.475842	177.776
100 m Butterfly	S5	1200	6.879713	612.506	5.942132	837.369
	S6	1200	6.879713	596.849	5.942132	605.29
	S7	1200	6.879713	595.291	5.942132	579.034
	S8	1200	6.879713	501.602	5.942132	516.97
	S9	1200	6.879713	493.315	5.942132	496.163
	S10	1200	6.879713	473.929	5.942132	482.633
	S11	1200	6.879713	504.472	5.942132	551.889
	S12	1200	6.879713	461.425	5.942132	470.871
	S13	1200	6.879713	461.727	5.942132	468.707
	S14	1200	6.879713	480.454	5.942132	495.509
200 m Butterfly	S8	1200	10.3374	1638.146	10.33026	1989.046
	S9	1200	10.3374	1557.856	10.33026	1799.062
	S10	1200	10.3374	1524.459	10.33026	1754.665
	S11	1200	10.3374	1660.231	10.33026	2056.550
	S12	1200	10.3374	1504.951	10.33026	1803.151
	S13	1200	10.3374	1451.375	10.33026	1733.364

	S14	1200	10.3374	1555.833	10.33026	1794.597
150 m Individual	SM1	1200	5.178283	1985.293	4.01206	1290.402
Medley	SM2	1200	5.178283	1514.977	4.01206	1639.003
	SM3	1200	5.178283	1149.735	4.01206	1024.164
	SM4	1200	5.178283	994.302	4.01206	923.491
200 m Individual	SM3	1200	7.178478	2277.186	6.934477	1599.213
Medley	SM4	1200	7.178478	1720.716	6.934477	1814.963
	SM5	1200	7.178478	1579.932	6.934477	1693.905
	SM6	1200	7.178478	1411.803	6.934477	1510.596
	SM7	1200	7.178478	1333.179	6.934477	1489.31
	SM8	1200	7.178478	1248.407	6.934477	1385.269
	SM9	1200	7.178478	1192.337	6.934477	1311.22
	SM10	1200	7.178478	1146.542	6.934477	1247.68
	SM11	1200	7.178478	1245.684	6.934477	1394.663
	SM12	1200	7.178478	1115.967	6.934477	1240.286
	SM13	1200	7.178478	1118.659	6.934477	1234.023
	SM14	1200	7.178478	1152.291	6.934477	1255.895
400 m Individual	SM8	1200	9.413358	3262.879	8.545385	3726.912
Medley	SM9	1200	9.413358	3222.891	8.545385	3330.574
	SM10	1200	9.413358	3298.594	8.545385	3094.847
	SM11	1200	9.413358	3533.913	8.545385	3595.802
	SM12	1200	9.413358	3114.359	8.545385	3389.208
	SM13	1200	9.413358	3091.473	8.545385	3143.953
	SM14	1200	9.413358	3147.51	8.545385	3179.655

Youth Point Scores 2023

For youth events, the formula as shown above does not change apart from an adjustment of the c factor to reflect the performance difference between top performers at major international Para swimming competitions and the average of performances expected at youth events.

Method to calculate the points for a specific performance remains the Gompertz function with an additional static factor of 1.2 applicable to all genders, events, and classes:

$$G(p, a, b, c) = q = ae^{-e^{b-1.2\frac{c}{p}}}$$

To calculate the required performance for given points, the inverse Gompertz function is

$$G^{-1}(q, a, b, c) = p = 1.2 \cdot c / \left(b - \ln \left(\ln \left(\frac{a}{q} \right) \right) \right)$$

with performance p (in seconds), points q , and parameters a, b, c as listed on pages 1-5 in this document.