

## 2022 WESO Event Score Data Summary.

The Science Olympiad and WESO are devoted to improving the quality of science education, increasing student interest in science, and providing recognition for outstanding achievement in science education. Our primary goals are for the students to learn and have fun.

The WESO board recognizes, however, that some level of feedback on placement is helpful to all schools, not just those that earned medals. We have provided placements to each school through Avogadro. Additionally, we are providing some information on the scoring for the individual events (average score, winning score, 5th place score - etc; NOT individual team scores). We expect this may be more useful for building type events than test events (i.e., it is better to know what the winning Aerodynamics score was than the Feathered Friends score, as the former metric might be used again and the latter is very dependent on actual test questions).

We hope to see you all again for WESO 2023!

<b>2nd grade</b>	Aerodynamics	Feathered Friends	The Human Machine	iRobot	Mystery Architecture	On Target	Pentathlon	Potions	Read It, Build It	Zip-A-Dee-Doo-Dah*
Average	13.6	16.3	27.5	37.5	63.0	351.0	189.3	19.4	25.3	6.5
Median	13.1	16.0	31.5	35.5	62.0	281.5	174.0	18.6	25.0	6.5
Std. Dev.	3.5	3.8	13.1	10.7	22.5	266.6	72.4	3.8	10.9	3.6
Winning Score	21.0	24.0	42.0	51.0	126.5	7.0	109.0	25.2	42.0	1 (0.010 sec)
5th Place	15.4	18.0	32.0	44.0	71.5	182.0	154.0	19.0	31.0	5 (0.121 sec)
Honorable Mention Cutoff	13.635	16.833	20	35.5	67	210	176	18.1	20	7 (0.177 sec)

<b>3rd grade</b>	Aerodynamics	Feathered Friends	The Human Machine	iRobot	Mystery Architecture	On Target	Pentathlon	Potions	Read It, Build It	Zip-A-Dee-Doo-Dah*
Average	15.9	15.07	33.7	40.0	53.5	351.6	182.9	17.0	33.2	7.5
Median	16.2	14.50	38.0	45.0	64.5	266.0	173.0	16.3	35.0	7.5
Std. Dev.	4.6	3.08	14.4	14.0	27.4	267.9	82.6	4.2	9.2	4.2
Winning Score	25.9	19.00	49.0	54.0	84.1	46.0	73.5	24.0	44.1	1 (0.063 sec)
5th Place	16.4	17.00	38.0	49.8	69.7	204.0	149.0	20.2	39.0	5 (0.284 sec)
Honorable Mention Cutoff	16.21	15.5	30	49.5	67.1	257	177	16.3	37	7 (0.385 sec)

<b>4th grade</b>	Aerodynamics	Feathered Friends	The Human Machine	iCompute	Mystery Architecture	On Target	Pentathlon	Potions	Write It, Build It	Zip-A-Dee-Doo-Dah*
Average	14.1	17.4	34.1	25.3	68.1	255.7	211.1	48.6	16.9	7.0
Median	12.8	17.9	39.0	25.8	69.2	198.5	217.8	49.8	17.5	7.2
Std. Dev.	2.8	4.6	14.1	9.8	23.2	207.7	82.4	13.3	7.6	3.8
Winning Score	19	25.0	47.0	45.0	111.0	36.0	97.0	67.0	28.0	1.2 (0.018 sec)
5th Place	16	20.0	39.0	30.5	85.5	132.0	196.0	55.0	20.0	6.4 (0.112 sec)
Honorable Mention Cutoff	13.95	18.67	29	26.5	77.4	160	231	52	16	7.4 (0.349 sec)

<b>5th grade</b>	Aerodynamics	Feathered Friends	The Human Machine	iCompute	Mystery Architecture	On Target	Pentathlon	Potions	Write It, Build It	Zip-A-Dee-Doo-Dah*
Average	12.9	17.3	31.7	26.7	78.2	261.3	244.6	43.9	15.1	6.0
Median	13.8	18.0	30.0	27.3	76.3	175.5	270.5	46.0	17.0	5.7
Std. Dev.	4.7	4.6	13.0	9.1	23.3	321.4	77.7	12.0	10.4	3.5
Winning Score	18	25.0	48.0	40.5	119.0	73.0	137.0	61.0	31.0	1.2 (0.004 sec)
5th Place	14	20.0	41.0	33.0	91.5	124.0	270.5	49.5	21.0	5.2 (0.033 sec)
Honorable Mention Cutoff	13.75	18	35	30.5	78	153	276.5	41	20	8.2 (0.231 sec)

\*

We have included the Zip Line deviation from target time for the medal places. The Zip Event Score Metric uses rank ordering from Zip line and test