

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 1	Fall	2023	4th Grade	Sciences	50	27	91	41	-41	1681
Classroom 2	Fall	2023	4th Grade	Social Studies	30	22	71	41	-41	1681
Classroom 3	Fall	2023	1st Grade	Sciences	20	19	68.42	48.42	-48.42	2344.4964
Classroom 4	Fall	2023	2nd Grade	Sciences	61.5	20	96	34.5	-34.5	1190.25
Classroom 5	Fall	2023	3rd Grade	Sciences	41	18	69	28	-28	784
Classroom 6	Fall	2023	10th Grade	Physical Education	46.1	100	86.588	40.488	-40.488	1639.278144
Classroom 7	Fall	2023	11th Grade	Art	60	78	88	28	-28	784
Classroom 8	Fall	2023	7th Grade	Sciences	6	114	53	47	-47	2209
Classroom 9	Fall	2023	3rd Grade	Sciences	54.54	22	86.36	31.82	-31.82	1012.5124
Classroom 10	Fall	2023	1st Grade	Music	94.5	60	93.75	-0.75	0.75	0.5625
Classroom 11	Fall	2023	1st Grade	Social Studies	85	20	94	9	-9	81
Classroom 12	Fall	2023	3rd Grade	Social Studies	16.6	23	96.2	79.6	-79.6	6336.16
Classroom 13	Fall	2023	Kindergarten	Sciences	51	9	98.81	47.81	-47.81	2285.7961
Classroom 14	Fall	2023	1st Grade	Social Studies	67	20	98	31	-31	961
Classroom 15	Fall	2023	3rd Grade	Sciences	66	28	80	14	-14	196
Classroom 16	Fall	2023	4th Grade	Social Studies	52.6	20	50	-2.6	2.6	6.76
Classroom 17	Fall	2023	5th Grade	Social Studies	20	16	67	47	-47	2209
Classroom 18	Fall	2023	3rd Grade	Sciences	58	28	70	12	-12	144
Classroom 19	Fall	2023	1st Grade	Sciences	82	16	93.4	11.4	-11.4	129.96
Classroom 20	Fall	2023	Kindergarten	Sciences	42.85	14	28.57	-14.28	14.28	203.9184
Classroom 21	Fall	2023	6th Grade	Sciences	5	18	80	75	-75	5625
Classroom 22	Fall	2023	8th Grade	Social Studies	53	39	85	32	-32	1024
Classroom 23	Fall	2023	11th Grade	English	70	70	85	15	-15	225
Classroom 24	Fall	2023	11th Grade	Mathematics	4.3	39	95	90.7	-90.7	8226.49
Classroom 25	Fall	2023	3rd Grade	Social Studies	56	27	83	27	-27	729
Classroom 26	Fall	2023	9th Grade	English	78.7	44	80.8	2.1	-2.1	4.41
Classroom 27	Fall	2023	9th Grade	Social Studies	18	36	87	69	-69	4761
Classroom 28	Fall	2023	Kindergarten	Social Studies	26	19	53	27	-27	729
Classroom 29	Fall	2023	3rd Grade	Sciences	40.6	24	63.5	22.9	-22.9	524.41
Classroom 30	Fall	2023	Kindergarten	Sciences	76	18	91	15	-15	225
Classroom 31	Fall	2023	3rd Grade	Social Studies	46.667	26	96.667	50	-50	2500
Classroom 32	Fall	2023	Kindergarten	Social Studies	23.6	17	47.2	23.6	-23.6	556.96
Classroom 33	Fall	2023	4th Grade	Social Studies	20	18	67	47	-47	2209
Classroom 34	Fall	2023	1st Grade	Social Studies	68.75	21	70.625	1.875	-1.875	3.515625
Classroom 35	Fall	2023	Kindergarten	Sciences	62	18	83	21	-21	441
Classroom 36	Fall	2023	10th Grade	Social Studies	34.1	126	80.94	46.84	-46.84	2193.9856
Classroom 37	Fall	2023	1st Grade	Sciences	85	21	85	0	0	0
Classroom 38	Fall	2023	12th Grade	Social Studies	19.7	57	62.7	43	-43	1849
Classroom 39	Fall	2023	3rd Grade	Art	33.333	37	91	57.667	-57.667	3325.482889
Classroom 40	Fall	2023	4th Grade	Physical Education	31.2	16	75	43.8	-43.8	1918.44
Classroom 41	Fall	2023	5th Grade	Social Studies	40	26	79	39	-39	1521
Classroom 42	Fall	2023	9th Grade	Social Studies	12	81	60	48	-48	2304
Classroom 43	Fall	2023	5th Grade	Social Studies	37.88	22	70.33	32.45	-32.45	1053.0025

Classroom 44	Fall	2023	2nd Grade	Social Studies	55	17	86	31	-31	961
Classroom 45	Fall	2023	4th Grade	Sciences	55	22	80.9	25.9	-25.9	670.81
Classroom 46	Fall	2023	8th Grade	Mathematics	5	20	82.5	77.5	-77.5	6006.25
Classroom 47	Fall	2023	10th Grade	Spanish	50.9	27	82	31.1	-31.1	967.21
Classroom 48	Fall	2023	5th Grade	Sciences	40	26	70.4	30.4	-30.4	924.16
Classroom 49	Fall	2023	2nd Grade	Social Studies	20	17	75	55	-55	3025
Classroom 50	Fall	2023	2nd Grade	Social Studies	47	17	55	8	-8	64
Classroom 51	Fall	2023	7th Grade	Physical Education	36	52	69	33	-33	1089
Classroom 52	Fall	2023	9th Grade	Mathematics	23	38	87	64	-64	4096
Classroom 53	Fall	2023	1st Grade	Sciences	49.28	20	70.7	21.42	-21.42	458.8164
Classroom 54	Fall	2023	10th Grade	Spanish	48	66	89.5	41.5	-41.5	1722.25
Classroom 55	Fall	2023	4th Grade	Sciences	0	15	63	63	-63	3969
Classroom 56	Fall	2023	4th Grade	Social Studies	39	9	86	47	-47	2209
Classroom 57	Fall	2023	2nd Grade	Social Studies	26	17	66	40	-40	1600
Classroom 58	Fall	2023	2nd Grade	Social Studies	42.85	24	91.6	48.75	-48.75	2376.5625
Classroom 59	Fall	2023	3rd Grade	Sciences	53.08	26	95	41.92	-41.92	1757.2864
Classroom 60	Fall	2023	1st Grade	Sciences	50	17	58	8	-8	64
Classroom 61	Fall	2023	3rd Grade	Social Studies	24	23	85.2	61.2	-61.2	3745.44
Classroom 62	Fall	2023	Kindergarten	Sciences	86.4	21	86.4	0	0	0
Classroom 63	Fall	2023	3rd Grade	Sciences	45	14	89	44	-44	1936
Classroom 64	Fall	2023	Kindergarten	Social Studies	58	15	73	15	-15	225
Classroom 65	Fall	2023	Kindergarten	Social Studies	55	20	82.5	27.5	-27.5	756.25
Classroom 66	Fall	2023	5th Grade	Social Studies	10	22	45	35	-35	1225
Classroom 67	Fall	2023	Kindergarten	Sciences	43.75	18	84.7	40.95	-40.95	1676.9025
Classroom 68	Fall	2023	1st Grade	Sciences	50	20	100	50	-50	2500
Classroom 69	Fall	2023	2nd Grade	Social Studies	75	20	98	23	-23	529
Classroom 70	Fall	2023	Kindergarten	Sciences	46	13	69	23	-23	529
Classroom 71	Fall	2023	3rd Grade	Social Studies	38	22	92	54	-54	2916
Classroom 72	Fall	2023	1st Grade	Social Studies	63.33	27	94	30.67	-30.67	940.6489
Classroom 73	Fall	2023	2nd Grade	Social Studies	1	15	51.25	50.25	-50.25	2525.0625
Classroom 74	Fall	2023	2nd Grade	Social Studies	53.8	16	71.5	17.7	-17.7	313.29
Classroom 75	Fall	2023	3rd Grade	Sciences	35	21	77	42	-42	1764
Classroom 76	Fall	2023	1st Grade	Sciences	72	23	74	2	-2	4
Classroom 77	Fall	2023	2nd Grade	Sciences	66	19	90.1	24.1	-24.1	580.81
Classroom 78	Fall	2023	2nd Grade	Sciences	67	16	91	24	-24	576
Classroom 79	Fall	2023	2nd Grade	Sciences	76.8	22	97.14	20.34	-20.34	413.7156
Classroom 80	Fall	2023	4th Grade	Sciences	84	23	86	2	-2	4
Classroom 81	Fall	2023	5th Grade	Social Studies	36	24	81	45	-45	2025
Classroom 82	Fall	2023	2nd Grade	Sciences	65	22	83	18	-18	324
Classroom 83	Fall	2023	1st Grade	Sciences	26	21	90	64	-64	4096
Classroom 84	Fall	2023	1st Grade	Social Studies	40	25	79	39	-39	1521
Classroom 85	Fall	2023	Kindergarten	Sciences	92	19	97	5	-5	25
Classroom 86	Fall	2023	2nd Grade	Sciences	54	23	84	30	-30	900
Classroom 87	Fall	2023	3rd Grade	Social Studies	5	23	32	27	-27	729
Classroom 88	Fall	2023	2nd Grade	Social Studies	8.5	16	59	50.5	-50.5	2550.25
Classroom 89	Fall	2023	Kindergarten	Sciences	70	17	100	30	-30	900

Classroom 90	Fall	2023	5th Grade	Sciences	53	11	70	17	-17	289
Classroom 91	Fall	2023	3rd Grade	Social Studies	5.78	17	59	53.22	-53.22	2832.3684
Classroom 92	Fall	2023	5th Grade	Social Studies	28	18	53.7	25.7	-25.7	660.49
Classroom 93	Fall	2023	5th Grade	Sciences	7	22	75	68	-68	4624
Classroom 94	Fall	2023	5th Grade	Social Studies	32	19	62	30	-30	900
Classroom 95	Fall	2023	5th Grade	Social Studies	19.7	37	41.35	21.65	-21.65	468.7225
Classroom 96	Fall	2023	3rd Grade	Sciences	29	22	76	47	-47	2209
Classroom 97	Fall	2023	Kindergarten	Sciences	50	16	75	25	-25	625
Classroom 98	Fall	2023	5th Grade	Sciences	61	10	83	22	-22	484
Classroom 99	Fall	2023	2nd Grade	Sciences	82	26	95	13	-13	169
Classroom 100	Fall	2023	2nd Grade	Social Studies	12	18	21	9	-9	81
Classroom 101	Fall	2023	Kindergarten	Social Studies	60	17	90	30	-30	900
Classroom 102	Fall	2023	5th Grade	Social Studies	30	27	96.6	66.6	-66.6	4435.56
Classroom 103	Fall	2023	5th Grade	Social Studies	9.56	23	70.4	60.84	-60.84	3701.5056
Classroom 104	Winter	2023	10th Grade	Music	67	70	91	24	-24	576
Classroom 105	Winter	2023	9th Grade	Social Studies	11	67	30	19	-19	361
Classroom 106	Winter	2023	7th Grade	Music	0	45	88	88	-88	7744
Classroom 107	Winter	2023	1st Grade	Art	83	55	89	6	-6	36
Classroom 108	Winter	2023	10th Grade	Social Studies	56.25	30	87.5	31.25	-31.25	976.5625
Classroom 109	Winter	2023	5th Grade	Art	32	23	52.8	20.8	-20.8	432.64
Classroom 110	Winter	2023	6th Grade	Music	35	25	50	15	-15	225
Classroom 111	Winter	2023	7th Grade	English	52.3	73	67.4	15.1	-15.1	228.01
Classroom 112	Winter	2023	11th Grade	Spanish	60	31	78	18	-18	324
Classroom 113	Winter	2023	12th Grade	Mathematics	0	21	79	79	-79	6241
Classroom 114	Winter	2023	12th Grade	Spanish	10	118	92.6	82.6	-82.6	6822.76
Classroom 115	Winter	2023	3rd Grade	Music	70	20	85	15	-15	225
Classroom 116	Winter	2023	9th Grade	Mathematics	4	55	68	64	-64	4096
Classroom 117	Winter	2023	10th Grade	Music	38.25	31	84.54	46.29	-46.29	2142.7641
Classroom 118	Winter	2023	7th Grade	English	12	135	80	68	-68	4624
Classroom 119	Winter	2023	7th Grade	Music	28	16	71	43	-43	1849
Classroom 120	Winter	2023	9th Grade	English	73	25	82	9	-9	81
Classroom 121	Winter	2023	1st Grade	Music	35	56	77	42	-42	1764
Classroom 122	Winter	2023	11th Grade	English	37.5	115	68.9	31.4	-31.4	985.96
Classroom 123	Winter	2023	9th Grade	Mathematics	27	23	63	36	-36	1296
Classroom 124	Winter	2023	5th Grade	Sciences	64.8	42	96	31.2	-31.2	973.44
Classroom 125	Winter	2023	11th Grade	English	16	99	82	66	-66	4356
Classroom 126	Winter	2023	7th Grade	English	41.9	70	92.1	50.2	-50.2	2520.04
Classroom 127	Winter	2023	1st Grade	Sciences	79	22	89	10	-10	100
Classroom 128	Winter	2023	5th Grade	Social Studies	48.4	20	83	34.6	-34.6	1197.16
Classroom 129	Winter	2023	9th Grade	Social Studies	65	79	87	22	-22	484
Classroom 130	Winter	2023	3rd Grade	Music	42	92	76	34	-34	1156
Classroom 131	Winter	2023	2nd Grade	Sciences	2	26	75	73	-73	5329
Classroom 132	Winter	2023	5th Grade	Sciences	27	22	79	52	-52	2704
Classroom 133	Winter	2023	11th Grade	Mathematics	25	26	87	62	-62	3844
Classroom 134	Winter	2023	3rd Grade	Sciences	67	17	85	18	-18	324
Classroom 135	Winter	2023	9th Grade	Sciences	20	23	61	41	-41	1681
Classroom 136	Winter	2023	4th Grade	Sciences	67	21	95	28	-28	784

Classroom 137	Winter	2023	5th Grade	Sciences	4	18	69	65	-65	4225
Classroom 138	Winter	2023	7th Grade	Music	33.6	59	97.2	63.6	-63.6	4044.96
Classroom 139	Winter	2023	9th Grade	Sciences	30	96	67	37	-37	1369
Classroom 140	Winter	2023	5th Grade	Sciences	61.99	19	81.87	19.88	-19.88	395.2144
Classroom 141	Winter	2023	6th Grade	Sciences	62	70	70	8	-8	64
Classroom 142	Winter	2023	1st Grade	Sciences	43.4	16	94.7	51.3	-51.3	2631.69
Classroom 143	Winter	2023	12th Grade	English	65	15	72.9	7.9	-7.9	62.41
Classroom 144	Winter	2023	5th Grade	Sciences	22	41	59	37	-37	1369
Classroom 145	Winter	2023	4th Grade	Sciences	56	17	92	36	-36	1296
Classroom 146	Winter	2023	9th Grade	English	64.25	46	76.869	12.619	-12.619	159.239161
Classroom 147	Winter	2023	7th Grade	Music	75.67	46	83.58	7.91	-7.91	62.5681
Classroom 148	Winter	2023	1st Grade	Sciences	25	17	86	61	-61	3721
Classroom 149	Winter	2023	2nd Grade	Sciences	55	20	85	30	-30	900
Classroom 150	Winter	2023	10th Grade	Mathematics	61.75	19	66	4.25	-4.25	18.0625
Classroom 151	Winter	2023	Kindergarten	Sciences	94	18	100	6	-6	36
Classroom 152	Winter	2023	6th Grade	Music	43	14	95	52	-52	2704
Classroom 153	Winter	2023	8th Grade	Social Studies	48	55	98.2	50.2	-50.2	2520.04
Classroom 154	Winter	2023	11th Grade	Music	66.11	73	90.54	24.43	-24.43	596.8249
Classroom 155	Winter	2023	3rd Grade	Social Studies	44.2	23	95.3	51.1	-51.1	2611.21
Classroom 156	Winter	2023	4th Grade	Sciences	21	21	78	57	-57	3249
Classroom 157	Winter	2023	3rd Grade	Sciences	71	18	89	18	-18	324
Classroom 158	Winter	2023	8th Grade	Music	70	37	95	25	-25	625
Classroom 159	Winter	2023	11th Grade	Social Studies	49	68	74	25	-25	625
Classroom 160	Winter	2023	10th Grade	Spanish	40.26	18	87.37	47.11	-47.11	2219.3521
Classroom 161	Winter	2023	11th Grade	English	73	22	87	14	-14	196
Classroom 162	Winter	2023	9th Grade	Social Studies	13.8	19	84.7	70.9	-70.9	5026.81
Classroom 163	Winter	2023	12th Grade	Music	33.13	33	52.46	19.33	-19.33	373.6489
Classroom 164	Winter	2023	10th Grade	Spanish	14	86	68.6	54.6	-54.6	2981.16
Classroom 165	Winter	2023	8th Grade	Mathematics	78.1	41	90.3	12.2	-12.2	148.84
Classroom 166	Winter	2023	7th Grade	Social Studies	11	113	72	61	-61	3721
Classroom 167	Winter	2023	Kindergarten	Social Studies	74	20	64	-10	10	100
Classroom 168	Winter	2023	5th Grade	Social Studies	40	18	70	30	-30	900
Classroom 169	Winter	2023	3rd Grade	Sciences	27	18	94	67	-67	4489
Classroom 170	Winter	2023	3rd Grade	Social Studies	36	15	63	27	-27	729
Classroom 171	Winter	2023	7th Grade	English	49.8	20	84.2	34.4	-34.4	1183.36
Classroom 172	Winter	2023	4th Grade	Sciences	58	20	93	35	-35	1225
Classroom 173	Winter	2023	5th Grade	Social Studies	19	24	81	62	-62	3844
Classroom 174	Winter	2023	5th Grade	Social Studies	1.5	21	62.5	61	-61	3721
Classroom 175	Winter	2023	8th Grade	English	50	118	75	25	-25	625
Classroom 176	Winter	2023	4th Grade	Sciences	59	20	82	23	-23	529
Classroom 177	Winter	2023	4th Grade	Sciences	17.73	16	61.65	43.92	-43.92	1928.9664
Classroom 178	Winter	2023	2nd Grade	Physical Education	65.62	16	79.76	14.14	-14.14	199.9396
Classroom 179	Winter	2023	12th Grade	Physical Education	30.4	35	93	62.6	-62.6	3918.76
Classroom 180	Winter	2023	3rd Grade	Social Studies	50	12	100	50	-50	2500
Classroom 182	Winter	2023	3rd Grade	Sciences	32	21	62	30	-30	900
Classroom 183	Winter	2023	5th Grade	Social Studies	35	19	81.75	46.75	-46.75	2185.5625

Classroom 184	Winter	2023	8th Grade	Music	62	32	90	28	-28	784
Classroom 185	Winter	2023	3rd Grade	Social Studies	16.25	17	75	58.75	-58.75	3451.5625
Classroom 186	Winter	2023	9th Grade	Sciences	43	18	77.06	34.06	-34.06	1160.0836
Classroom 187	Winter	2023	11th Grade	Mathematics	19.5	17	95.5	76	-76	5776
Classroom 188	Winter	2023	10th Grade	Sciences	20	110	96	76	-76	5776
Classroom 189	Winter	2023	11th Grade	Social Studies	72.3	49	87.5	15.2	-15.2	231.04
Classroom 190	Winter	2023	5th Grade	Sciences	31	23	78	47	-47	2209
Classroom 191	Winter	2023	11th Grade	Mathematics	20	40	83	63	-63	3969
Classroom 192	Winter	2023	10th Grade	Social Studies	30	89	80	50	-50	2500
Classroom 193	Winter	2023	11th Grade	English	33.3	44	88.3	55	-55	3025
Classroom 194	Winter	2023	10th Grade	French	82.8	21	95.8	13	-13	169
Classroom 195	Winter	2023	9th Grade	Mathematics	26	20	52	26	-26	676
Classroom 196	Winter	2023	10th Grade	Social Studies	58	25	79	21	-21	441
Classroom 197	Winter	2023	8th Grade	Social Studies	30	90	90	60	-60	3600
Classroom 198	Winter	2023	11th Grade	English	57.778	26	75.4	17.622	-17.622	310.534884
Classroom 199	Winter	2023	5th Grade	Sciences	82.3	24	93.3	11	-11	121
Classroom 200	Winter	2023	7th Grade	Social Studies	48	70	80	32	-32	1024
Classroom 201	Winter	2023	11th Grade	Social Studies	65.71	21	95.8	30.09	-30.09	905.4081
Classroom 202	Winter	2023	10th Grade	Sciences	10	66	88.86	78.86	-78.86	6218.8996
Classroom 203	Winter	2023	6th Grade	Social Studies	30	19	53	23	-23	529
Classroom 204	Winter	2023	Kindergarten	Sciences	48	15	87.5	39.5	-39.5	1560.25
Classroom 205	Winter	2023	2nd Grade	Sciences	30	19	73	43	-43	1849
Classroom 206	Winter	2023	1st Grade	Social Studies	90	17	93	3	-3	9
Classroom 207	Winter	2023	1st Grade	Social Studies	50	18	93	43	-43	1849
Classroom 208	Winter	2023	5th Grade	Sciences	36.9	22	85.7	48.8	-48.8	2381.44
Classroom 209	Winter	2023	Kindergarten	Sciences	74	16	90	16	-16	256
Classroom 210	Winter	2023	5th Grade	Social Studies	26	17	62	36	-36	1296
Classroom 211	Winter	2023	5th Grade	Sciences	36.3	16	90	53.7	-53.7	2883.69
Classroom 212	Winter	2023	2nd Grade	Social Studies	40	16	83	43	-43	1849
Classroom 213	Winter	2023	5th Grade	Sciences	23.3	20	73.25	49.95	-49.95	2495.0025
Classroom 214	Winter	2023	3rd Grade	Sciences	60	22	60	0	0	0
Classroom 215	Winter	2023	4th Grade	Social Studies	0	17	84	84	-84	7056
Classroom 216	Winter	2023	5th Grade	Social Studies	15.82	18	37.96	22.14	-22.14	490.1796
Classroom 217	Winter	2023	1st Grade	Sciences	69	17	78	9	-9	81
Classroom 218	Winter	2023	5th Grade	Sciences	67.15	21	84.66	17.51	-17.51	306.6001
Classroom 219	Winter	2023	4th Grade	Social Studies	46	22	83	37	-37	1369
Classroom 220	Winter	2023	3rd Grade	Sciences	31	26	60	29	-29	841
Classroom 221	Winter	2023	5th Grade	Social Studies	44.4	32	92.7	48.3	-48.3	2332.89
Classroom 222	Winter	2023	4th Grade	Sciences	52	23	62	10	-10	100
Classroom 223	Winter	2023	3rd Grade	Sciences	85	21	98.5	13.5	-13.5	182.25
Classroom 224	Winter	2023	3rd Grade	Social Studies	0	21	36	36	-36	1296
Classroom 225	Winter	2023	3rd Grade	Sciences	53	15	86	33	-33	1089
Classroom 226	Winter	2023	1st Grade	Sciences	40.8	23	97.4	56.6	-56.6	3203.56
Classroom 227	Winter	2023	10th Grade	Mathematics	51.2	30	75.4	24.2	-24.2	585.64
Classroom 228	Winter	2023	3rd Grade	Social Studies	28	23	74	46	-46	2116
Classroom 229	Winter	2023	8th Grade	Social Studies	28	57	89	61	-61	3721
Classroom 230	Winter	2023	11th Grade	Mathematics	8.4	76	64	55.6	-55.6	3091.36

Classroom 231	Winter	2023	Kindergarten	Sciences	62.8	14	90	27.2	-27.2	739.84
Classroom 232	Winter	2023	Kindergarten	Art	25	66	66	41	-41	1681
Classroom 233	Winter	2023	12th Grade	Music	60	12	85	25	-25	625
Classroom 234	Winter	2023	2nd Grade	Social Studies	54	20	80.6	26.6	-26.6	707.56
Classroom 235	Winter	2023	Kindergarten	Sciences	72	22	93.5	21.5	-21.5	462.25
Classroom 236	Winter	2023	2nd Grade	Sciences	69.94	17	97.2	27.26	-27.26	743.1076
Classroom 237	Winter	2023	5th Grade	Sciences	40	32	76	36	-36	1296
Classroom 238	Winter	2023	1st Grade	Sciences	45	22	95	50	-50	2500
Classroom 239	Winter	2023	1st Grade	Social Studies	48.98	22	78.88	29.9	-29.9	894.01
Classroom 240	Winter	2023	3rd Grade	Social Studies	43	20	75	32	-32	1024
Classroom 241	Winter	2023	3rd Grade	Sciences	48	19	76	28	-28	784
Classroom 242	Winter	2023	2nd Grade	Sciences	72	20	90.5	18.5	-18.5	342.25
Classroom 243	Winter	2023	5th Grade	Social Studies	0.05	5	81.25	81.2	-81.2	6593.44
Classroom 244	Winter	2023	5th Grade	Sciences	42	23	95	53	-53	2809

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-8634.17	410504.56
243	7691	35.53	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value ($\sum d/N$)	-35.53
M =Middle value	103718.92
O =Bottom Value	58806.00
P =Square root of M/O	1.33
T = (L/P)	-26.75
$\alpha = 0.05$	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.716

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 13	Fall	2023	Kindergarten	Sciences	51	9	98.81	47.81	-47.81	2285.7961
Classroom 28	Fall	2023	Kindergarten	Social Studies	26	19	53	27	-27	729
Classroom 30	Fall	2023	Kindergarten	Sciences	76	18	91	15	-15	225
Classroom 32	Fall	2023	Kindergarten	Social Studies	23.6	17	47.2	23.6	-23.6	556.96
Classroom 35	Fall	2023	Kindergarten	Sciences	62	18	83	21	-21	441
Classroom 62	Fall	2023	Kindergarten	Sciences	86.4	21	86.4	0	0	0
Classroom 64	Fall	2023	Kindergarten	Social Studies	58	15	73	15	-15	225
Classroom 65	Fall	2023	Kindergarten	Social Studies	55	20	82.5	27.5	-27.5	756.25
Classroom 67	Fall	2023	Kindergarten	Sciences	43.75	18	84.7	40.95	-40.95	1676.9025
Classroom 70	Fall	2023	Kindergarten	Sciences	46	13	69	23	-23	529
Classroom 85	Fall	2023	Kindergarten	Sciences	92	19	97	5	-5	25
Classroom 89	Fall	2023	Kindergarten	Sciences	70	17	100	30	-30	900
Classroom 97	Fall	2023	Kindergarten	Sciences	50	16	75	25	-25	625
Classroom 101	Fall	2023	Kindergarten	Social Studies	60	17	90	30	-30	900
Classroom 151	Winter	2023	Kindergarten	Sciences	94	18	100	6	-6	36
Classroom 167	Winter	2023	Kindergarten	Social Studies	74	20	64	-10	10	100
Classroom 204	Winter	2023	Kindergarten	Sciences	48	15	87.5	39.5	-39.5	1560.25
Classroom 209	Winter	2023	Kindergarten	Sciences	74	16	90	16	-16	256
Classroom 231	Winter	2023	Kindergarten	Sciences	62.8	14	90	27.2	-27.2	739.84
Classroom 232	Winter	2023	Kindergarten	Art	25	66	66	41	-41	1681
Classroom 235	Winter	2023	Kindergarten	Sciences	72	22	93.5	21.5	-21.5	462.25

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-472.06	14710.25
21	407	22.48	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value (Σd/N)	-22.48
M =Middle value	4098.79
O =Bottom Value	420.00
P =Square root of M/O	3.12
T = (L/P)	-7.20
α = 0.05	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.570

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 3	Fall	2023	1st Grade	Sciences	20	19	68.42	48.42	-48.42	2344.4964
Classroom 11	Fall	2023	1st Grade	Social Studies	85	20	94	9	-9	81
Classroom 14	Fall	2023	1st Grade	Social Studies	67	20	98	31	-31	961
Classroom 19	Fall	2023	1st Grade	Sciences	82	16	93.4	11.4	-11.4	129.96
Classroom 34	Fall	2023	1st Grade	Social Studies	68.75	21	70.625	1.875	-1.875	3.515625
Classroom 37	Fall	2023	1st Grade	Sciences	85	21	85	0	0	0
Classroom 53	Fall	2023	1st Grade	Sciences	49.28	20	70.7	21.42	-21.42	458.8164
Classroom 60	Fall	2023	1st Grade	Sciences	50	17	58	8	-8	64
Classroom 68	Fall	2023	1st Grade	Sciences	50	20	100	50	-50	2500
Classroom 72	Fall	2023	1st Grade	Social Studies	63.33	27	94	30.67	-30.67	940.6489
Classroom 76	Fall	2023	1st Grade	Sciences	72	23	74	2	-2	4
Classroom 83	Fall	2023	1st Grade	Sciences	26	21	90	64	-64	4096
Classroom 84	Fall	2023	1st Grade	Social Studies	40	25	79	39	-39	1521
Classroom 107	Winter	2023	1st Grade	Art	83	55	89	6	-6	36
Classroom 121	Winter	2023	1st Grade	Music	35	56	77	42	-42	1764
Classroom 127	Winter	2023	1st Grade	Sciences	79	22	89	10	-10	100
Classroom 142	Winter	2023	1st Grade	Sciences	43.4	16	94.7	51.3	-51.3	2631.69
Classroom 148	Winter	2023	1st Grade	Sciences	25	17	86	61	-61	3721
Classroom 206	Winter	2023	1st Grade	Social Studies	90	17	93	3	-3	9
Classroom 207	Winter	2023	1st Grade	Social Studies	50	18	93	43	-43	1849
Classroom 217	Winter	2023	1st Grade	Sciences	69	17	78	9	-9	81
Classroom 226	Winter	2023	1st Grade	Sciences	40.8	23	97.4	56.6	-56.6	3203.56
Classroom 238	Winter	2023	1st Grade	Sciences	45	22	95	50	-50	2500
Classroom 239	Winter	2023	1st Grade	Social Studies	48.98	22	78.88	29.9	-29.9	894.01

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-678.59	29893.70
24	551	28.27	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value ($\sum d/N$)	-28.27
M =Middle value	10707.13
O =Bottom Value	552.00
P =Square root of M/O	4.40
T = (L/P)	-6.42
$\alpha = 0.05$	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.310

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 4	Fall	2023	2nd Grade	Sciences	61.5	20	96	34.5	-34.5	1190.25
Classroom 44	Fall	2023	2nd Grade	Social Studies	55	17	86	31	-31	961
Classroom 49	Fall	2023	2nd Grade	Social Studies	20	17	75	55	-55	3025
Classroom 50	Fall	2023	2nd Grade	Social Studies	47	17	55	8	-8	64
Classroom 57	Fall	2023	2nd Grade	Social Studies	26	17	66	40	-40	1600
Classroom 58	Fall	2023	2nd Grade	Social Studies	42.85	24	91.6	48.75	-48.75	2376.5625
Classroom 69	Fall	2023	2nd Grade	Social Studies	75	20	98	23	-23	529
Classroom 73	Fall	2023	2nd Grade	Social Studies	1	15	51.25	50.25	-50.25	2525.0625
Classroom 74	Fall	2023	2nd Grade	Social Studies	53.8	16	71.5	17.7	-17.7	313.29
Classroom 77	Fall	2023	2nd Grade	Sciences	66	19	90.1	24.1	-24.1	580.81
Classroom 78	Fall	2023	2nd Grade	Sciences	67	16	91	24	-24	576
Classroom 79	Fall	2023	2nd Grade	Sciences	76.8	22	97.14	20.34	-20.34	413.7156
Classroom 82	Fall	2023	2nd Grade	Sciences	65	22	83	18	-18	324
Classroom 86	Fall	2023	2nd Grade	Sciences	54	23	84	30	-30	900
Classroom 88	Fall	2023	2nd Grade	Social Studies	8.5	16	59	50.5	-50.5	2550.25
Classroom 99	Fall	2023	2nd Grade	Sciences	82	26	95	13	-13	169
Classroom 100	Fall	2023	2nd Grade	Social Studies	12	18	21	9	-9	81
Classroom 131	Winter	2023	2nd Grade	Sciences	2	26	75	73	-73	5329
Classroom 149	Winter	2023	2nd Grade	Sciences	55	20	85	30	-30	900
Classroom 178	Winter	2023	2nd Grade	Physical Education	65.62	16	79.76	14.14	-14.14	199.9396
Classroom 205	Winter	2023	2nd Grade	Sciences	30	19	73	43	-43	1849
Classroom 212	Winter	2023	2nd Grade	Social Studies	40	16	83	43	-43	1849
Classroom 234	Winter	2023	2nd Grade	Social Studies	54	20	80.6	26.6	-26.6	707.56
Classroom 236	Winter	2023	2nd Grade	Sciences	69.94	17	97.2	27.26	-27.26	743.1076
Classroom 242	Winter	2023	2nd Grade	Sciences	72	20	90.5	18.5	-18.5	342.25

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-772.64	30098.80
25	477	30.91	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value (Σd/N)	-30.91
M =Middle value	6219.90
O =Bottom Value	600.00
P =Square root of M/O	3.22
T = (L/P)	-9.60
α = 0.05	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.920

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 5	Fall	2023	3rd Grade	Sciences	41	18	69	28	-28	784
Classroom 9	Fall	2023	3rd Grade	Sciences	54.54	22	86.36	31.82	-31.82	1012.5124
Classroom 12	Fall	2023	3rd Grade	Social Studies	16.6	23	96.2	79.6	-79.6	6336.16
Classroom 15	Fall	2023	3rd Grade	Sciences	66	28	80	14	-14	196
Classroom 18	Fall	2023	3rd Grade	Sciences	58	28	70	12	-12	144
Classroom 25	Fall	2023	3rd Grade	Social Studies	56	27	83	27	-27	729
Classroom 29	Fall	2023	3rd Grade	Sciences	40.6	24	63.5	22.9	-22.9	524.41
Classroom 31	Fall	2023	3rd Grade	Social Studies	46.667	26	96.667	50	-50	2500
Classroom 39	Fall	2023	3rd Grade	Art	33.333	37	91	57.667	-57.667	3325.482889
Classroom 59	Fall	2023	3rd Grade	Sciences	53.08	26	95	41.92	-41.92	1757.2864
Classroom 61	Fall	2023	3rd Grade	Social Studies	24	23	85.2	61.2	-61.2	3745.44
Classroom 63	Fall	2023	3rd Grade	Sciences	45	14	89	44	-44	1936
Classroom 71	Fall	2023	3rd Grade	Social Studies	38	22	92	54	-54	2916
Classroom 75	Fall	2023	3rd Grade	Sciences	35	21	77	42	-42	1764
Classroom 87	Fall	2023	3rd Grade	Social Studies	5	23	32	27	-27	729
Classroom 91	Fall	2023	3rd Grade	Social Studies	5.78	17	59	53.22	-53.22	2832.3684
Classroom 96	Fall	2023	3rd Grade	Sciences	29	22	76	47	-47	2209
Classroom 115	Winter	2023	3rd Grade	Music	70	20	85	15	-15	225
Classroom 130	Winter	2023	3rd Grade	Music	42	92	76	34	-34	1156
Classroom 134	Winter	2023	3rd Grade	Sciences	67	17	85	18	-18	324
Classroom 155	Winter	2023	3rd Grade	Social Studies	44.2	23	95.3	51.1	-51.1	2611.21
Classroom 157	Winter	2023	3rd Grade	Sciences	71	18	89	18	-18	324
Classroom 169	Winter	2023	3rd Grade	Sciences	27	18	94	67	-67	4489
Classroom 170	Winter	2023	3rd Grade	Social Studies	36	15	63	27	-27	729
Classroom 180	Winter	2023	3rd Grade	Social Studies	50	12	100	50	-50	2500
Classroom 182	Winter	2023	3rd Grade	Sciences	32	21	62	30	-30	900
Classroom 185	Winter	2023	3rd Grade	Social Studies	16.25	17	75	58.75	-58.75	3451.5625
Classroom 214	Winter	2023	3rd Grade	Sciences	60	22	60	0	0	0
Classroom 220	Winter	2023	3rd Grade	Sciences	31	26	60	29	-29	841
Classroom 223	Winter	2023	3rd Grade	Sciences	85	21	98.5	13.5	-13.5	182.25
Classroom 224	Winter	2023	3rd Grade	Social Studies	0	21	36	36	-36	1296
Classroom 225	Winter	2023	3rd Grade	Sciences	53	15	86	33	-33	1089
Classroom 228	Winter	2023	3rd Grade	Social Studies	28	23	74	46	-46	2116
Classroom 240	Winter	2023	3rd Grade	Social Studies	43	20	75	32	-32	1024
Classroom 241	Winter	2023	3rd Grade	Sciences	48	19	76	28	-28	784

Number of Tests = N	Number of K-12 Students:	Average % Improvement:
35	814	36.56

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

-1279.68	57482.68
"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
L =Top Value ($\sum d/N$)	-36.56
M =Middle value	10694.88
O =Bottom Value	1190.00
P =Square root of M/O	3.00
T = (L/P)	-12.20
$\alpha = 0.05$	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-2.062

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 1	Fall	2023	4th Grade	Sciences	50	27	91	41	-41	1681
Classroom 2	Fall	2023	4th Grade	Social Studies	30	22	71	41	-41	1681
Classroom 33	Fall	2023	4th Grade	Social Studies	20	18	67	47	-47	2209
Classroom 40	Fall	2023	4th Grade	Physical Education	31.2	16	75	43.8	-43.8	1918.44
Classroom 45	Fall	2023	4th Grade	Sciences	55	22	80.9	25.9	-25.9	670.81
Classroom 55	Fall	2023	4th Grade	Sciences	0	15	63	63	-63	3969
Classroom 56	Fall	2023	4th Grade	Social Studies	39	9	86	47	-47	2209
Classroom 80	Fall	2023	4th Grade	Sciences	84	23	86	2	-2	4
Classroom 136	Winter	2023	4th Grade	Sciences	67	21	95	28	-28	784
Classroom 145	Winter	2023	4th Grade	Sciences	56	17	92	36	-36	1296
Classroom 156	Winter	2023	4th Grade	Sciences	21	21	78	57	-57	3249
Classroom 172	Winter	2023	4th Grade	Sciences	58	20	93	35	-35	1225
Classroom 176	Winter	2023	4th Grade	Sciences	59	20	82	23	-23	529
Classroom 177	Winter	2023	4th Grade	Sciences	17.73	16	61.65	43.92	-43.92	1928.9664
Classroom 215	Winter	2023	4th Grade	Social Studies	0	17	84	84	-84	7056
Classroom 219	Winter	2023	4th Grade	Social Studies	46	22	83	37	-37	1369
Classroom 222	Winter	2023	4th Grade	Sciences	52	23	62	10	-10	100

Number of Tests = N 17	Number of K-12 Students: 326	Average % Improvement: 39.10	-664.62	31879.22
			"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value (Σd/N)	-39.10
M =Middle value	5895.70
O =Bottom Value	272.00
P =Square root of M/O	4.66
T = (L/P)	-8.40
α = 0.05	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-2.037

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 17	Fall	2023	5th Grade	Social Studies	20	16	67	47	-47	2209
Classroom 41	Fall	2023	5th Grade	Social Studies	40	26	79	39	-39	1521
Classroom 43	Fall	2023	5th Grade	Social Studies	37.88	22	70.33	32.45	-32.45	1053.0025
Classroom 48	Fall	2023	5th Grade	Sciences	40	26	70.4	30.4	-30.4	924.16
Classroom 66	Fall	2023	5th Grade	Social Studies	10	22	45	35	-35	1225
Classroom 81	Fall	2023	5th Grade	Social Studies	36	24	81	45	-45	2025
Classroom 90	Fall	2023	5th Grade	Sciences	53	11	70	17	-17	289
Classroom 92	Fall	2023	5th Grade	Social Studies	28	18	53.7	25.7	-25.7	660.49
Classroom 93	Fall	2023	5th Grade	Sciences	7	22	75	68	-68	4624
Classroom 94	Fall	2023	5th Grade	Social Studies	32	19	62	30	-30	900
Classroom 95	Fall	2023	5th Grade	Social Studies	19.7	37	41.35	21.65	-21.65	468.7225
Classroom 98	Fall	2023	5th Grade	Sciences	61	10	83	22	-22	484
Classroom 102	Fall	2023	5th Grade	Social Studies	30	27	96.6	66.6	-66.6	4435.56
Classroom 103	Fall	2023	5th Grade	Social Studies	9.56	23	70.4	60.84	-60.84	3701.5056
Classroom 109	Winter	2023	5th Grade	Art	32	23	52.8	20.8	-20.8	432.64
Classroom 124	Winter	2023	5th Grade	Sciences	64.8	42	96	31.2	-31.2	973.44
Classroom 128	Winter	2023	5th Grade	Social Studies	48.4	20	83	34.6	-34.6	1197.16
Classroom 132	Winter	2023	5th Grade	Sciences	27	22	79	52	-52	2704
Classroom 137	Winter	2023	5th Grade	Sciences	4	18	69	65	-65	4225
Classroom 140	Winter	2023	5th Grade	Sciences	61.99	19	81.87	19.88	-19.88	395.2144
Classroom 144	Winter	2023	5th Grade	Sciences	22	41	59	37	-37	1369
Classroom 168	Winter	2023	5th Grade	Social Studies	40	18	70	30	-30	900
Classroom 173	Winter	2023	5th Grade	Social Studies	19	24	81	62	-62	3844
Classroom 174	Winter	2023	5th Grade	Social Studies	1.5	21	62.5	61	-61	3721
Classroom 183	Winter	2023	5th Grade	Social Studies	35	19	81.75	46.75	-46.75	2185.5625
Classroom 190	Winter	2023	5th Grade	Sciences	31	23	78	47	-47	2209
Classroom 199	Winter	2023	5th Grade	Sciences	82.3	24	93.3	11	-11	121
Classroom 208	Winter	2023	5th Grade	Sciences	36.9	22	85.7	48.8	-48.8	2381.44
Classroom 210	Winter	2023	5th Grade	Social Studies	26	17	62	36	-36	1296
Classroom 211	Winter	2023	5th Grade	Sciences	36.3	16	90	53.7	-53.7	2883.69
Classroom 213	Winter	2023	5th Grade	Sciences	23.3	20	73.25	49.95	-49.95	2495.0025
Classroom 216	Winter	2023	5th Grade	Social Studies	15.82	18	37.96	22.14	-22.14	490.1796
Classroom 218	Winter	2023	5th Grade	Sciences	67.15	21	84.66	17.51	-17.51	306.6001
Classroom 221	Winter	2023	5th Grade	Social Studies	44.4	32	92.7	48.3	-48.3	2332.89
Classroom 237	Winter	2023	5th Grade	Sciences	40	32	76	36	-36	1296
Classroom 243	Winter	2023	5th Grade	Social Studies	0.05	5	81.25	81.2	-81.2	6593.44
Classroom 244	Winter	2023	5th Grade	Sciences	42	23	95	53	-53	2809

Number of Tests = N	Number of K-12 Students:	Average % Improvement:
37	814	40.69

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

-1505.47	71681.70
"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
L =Top Value ($\sum d/N$)	-40.69
M =Middle value	10426.57
O =Bottom Value	1332.00
P =Square root of M/O	2.80
T = (L/P)	-14.54
$\alpha = 0.05$	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-2.391

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 8	Fall	2023	7th Grade	Sciences	6	114	53	47	-47	2209
Classroom 21	Fall	2023	6th Grade	Sciences	5	18	80	75	-75	5625
Classroom 22	Fall	2023	8th Grade	Social Studies	53	39	85	32	-32	1024
Classroom 46	Fall	2023	8th Grade	Mathematics	5	20	82.5	77.5	-77.5	6006.25
Classroom 51	Fall	2023	7th Grade	Physical Education	36	52	69	33	-33	1089
Classroom 106	Winter	2023	7th Grade	Music	0	45	88	88	-88	7744
Classroom 110	Winter	2023	6th Grade	Music	35	25	50	15	-15	225
Classroom 111	Winter	2023	7th Grade	English	52.3	73	67.4	15.1	-15.1	228.01
Classroom 118	Winter	2023	7th Grade	English	12	135	80	68	-68	4624
Classroom 119	Winter	2023	7th Grade	Music	28	16	71	43	-43	1849
Classroom 126	Winter	2023	7th Grade	English	41.9	70	92.1	50.2	-50.2	2520.04
Classroom 138	Winter	2023	7th Grade	Music	33.6	59	97.2	63.6	-63.6	4044.96
Classroom 141	Winter	2023	6th Grade	Sciences	62	70	70	8	-8	64
Classroom 147	Winter	2023	7th Grade	Music	75.67	46	83.58	7.91	-7.91	62.5681
Classroom 152	Winter	2023	6th Grade	Music	43	14	95	52	-52	2704
Classroom 153	Winter	2023	8th Grade	Social Studies	48	55	98.2	50.2	-50.2	2520.04
Classroom 158	Winter	2023	8th Grade	Music	70	37	95	25	-25	625
Classroom 165	Winter	2023	8th Grade	Mathematics	78.1	41	90.3	12.2	-12.2	148.84
Classroom 166	Winter	2023	7th Grade	Social Studies	11	113	72	61	-61	3721
Classroom 171	Winter	2023	7th Grade	English	49.8	20	84.2	34.4	-34.4	1183.36
Classroom 175	Winter	2023	8th Grade	English	50	118	75	25	-25	625
Classroom 184	Winter	2023	8th Grade	Music	62	32	90	28	-28	784
Classroom 197	Winter	2023	8th Grade	Social Studies	30	90	90	60	-60	3600
Classroom 200	Winter	2023	7th Grade	Social Studies	48	70	80	32	-32	1024
Classroom 203	Winter	2023	6th Grade	Social Studies	30	19	53	23	-23	529
Classroom 229	Winter	2023	8th Grade	Social Studies	28	57	89	61	-61	3721

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-1087.11	58500.07
26	1446	41.81	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value (Σd/N)	-41.81
M =Middle value	13045.91
O =Bottom Value	650.00
P =Square root of M/O	4.48
T = (L/P)	-9.33
α = 0.05	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.830

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 6	Fall	2023	10th Grade	Physical Education	46.1	100	86.588	40.488	-40.488	1639.278144
Classroom 7	Fall	2023	11th Grade	Art	60	78	88	28	-28	784
Classroom 23	Fall	2023	11th Grade	English	70	70	85	15	-15	225
Classroom 24	Fall	2023	11th Grade	Mathematics	4.3	39	95	90.7	-90.7	8226.49
Classroom 26	Fall	2023	9th Grade	English	78.7	44	80.8	2.1	-2.1	4.41
Classroom 27	Fall	2023	9th Grade	Social Studies	18	36	87	69	-69	4761
Classroom 36	Fall	2023	10th Grade	Social Studies	34.1	126	80.94	46.84	-46.84	2193.9856
Classroom 38	Fall	2023	12th Grade	Social Studies	19.7	57	62.7	43	-43	1849
Classroom 42	Fall	2023	9th Grade	Social Studies	12	81	60	48	-48	2304
Classroom 47	Fall	2023	10th Grade	Spanish	50.9	27	82	31.1	-31.1	967.21
Classroom 52	Fall	2023	9th Grade	Mathematics	23	38	87	64	-64	4096
Classroom 54	Fall	2023	10th Grade	Spanish	48	66	89.5	41.5	-41.5	1722.25
Classroom 104	Winter	2023	10th Grade	Music	67	70	91	24	-24	576
Classroom 105	Winter	2023	9th Grade	Social Studies	11	67	30	19	-19	361
Classroom 108	Winter	2023	10th Grade	Social Studies	56.25	30	87.5	31.25	-31.25	976.5625
Classroom 112	Winter	2023	11th Grade	Spanish	60	31	78	18	-18	324
Classroom 113	Winter	2023	12th Grade	Mathematics	0	21	79	79	-79	6241
Classroom 114	Winter	2023	12th Grade	Spanish	10	118	92.6	82.6	-82.6	6822.76
Classroom 116	Winter	2023	9th Grade	Mathematics	4	55	68	64	-64	4096
Classroom 117	Winter	2023	10th Grade	Music	38.25	31	84.54	46.29	-46.29	2142.7641
Classroom 120	Winter	2023	9th Grade	English	73	25	82	9	-9	81
Classroom 122	Winter	2023	11th Grade	English	37.5	115	68.9	31.4	-31.4	985.96
Classroom 123	Winter	2023	9th Grade	Mathematics	27	23	63	36	-36	1296
Classroom 125	Winter	2023	11th Grade	English	16	99	82	66	-66	4356
Classroom 129	Winter	2023	9th Grade	Social Studies	65	79	87	22	-22	484
Classroom 133	Winter	2023	11th Grade	Mathematics	25	26	87	62	-62	3844
Classroom 135	Winter	2023	9th Grade	Sciences	20	23	61	41	-41	1681
Classroom 139	Winter	2023	9th Grade	Sciences	30	96	67	37	-37	1369
Classroom 143	Winter	2023	12th Grade	English	65	15	72.9	7.9	-7.9	62.41
Classroom 146	Winter	2023	9th Grade	English	64.25	46	76.869	12.619	-12.619	159.239161
Classroom 150	Winter	2023	10th Grade	Mathematics	61.75	19	66	4.25	-4.25	18.0625
Classroom 154	Winter	2023	11th Grade	Music	66.11	73	90.54	24.43	-24.43	596.8249
Classroom 159	Winter	2023	11th Grade	Social Studies	49	68	74	25	-25	625
Classroom 160	Winter	2023	10th Grade	Spanish	40.26	18	87.37	47.11	-47.11	2219.3521
Classroom 161	Winter	2023	11th Grade	English	73	22	87	14	-14	196
Classroom 162	Winter	2023	9th Grade	Social Studies	13.8	19	84.7	70.9	-70.9	5026.81
Classroom 163	Winter	2023	12th Grade	Music	33.13	33	52.46	19.33	-19.33	373.6489
Classroom 164	Winter	2023	10th Grade	Spanish	14	86	68.6	54.6	-54.6	2981.16
Classroom 179	Winter	2023	12th Grade	Physical Education	30.4	35	93	62.6	-62.6	3918.76
Classroom 186	Winter	2023	9th Grade	Sciences	43	18	77.06	34.06	-34.06	1160.0836
Classroom 187	Winter	2023	11th Grade	Mathematics	19.5	17	95.5	76	-76	5776
Classroom 188	Winter	2023	10th Grade	Sciences	20	110	96	76	-76	5776
Classroom 189	Winter	2023	11th Grade	Social Studies	72.3	49	87.5	15.2	-15.2	231.04

Classroom 191	Winter	2023	11th Grade	Mathematics	20	40	83	63	-63	3969
Classroom 192	Winter	2023	10th Grade	Social Studies	30	89	80	50	-50	2500
Classroom 193	Winter	2023	11th Grade	English	33.3	44	88.3	55	-55	3025
Classroom 194	Winter	2023	10th Grade	French	82.8	21	95.8	13	-13	169
Classroom 195	Winter	2023	9th Grade	Mathematics	26	20	52	26	-26	676
Classroom 196	Winter	2023	10th Grade	Social Studies	58	25	79	21	-21	441
Classroom 198	Winter	2023	11th Grade	English	57.778	26	75.4	17.622	-17.622	310.534884
Classroom 201	Winter	2023	11th Grade	Social Studies	65.71	21	95.8	30.09	-30.09	905.4081
Classroom 202	Winter	2023	10th Grade	Sciences	10	66	88.86	78.86	-78.86	6218.8996
Classroom 227	Winter	2023	10th Grade	Mathematics	51.2	30	75.4	24.2	-24.2	585.64
Classroom 230	Winter	2023	11th Grade	Mathematics	8.4	76	64	55.6	-55.6	3091.36
Classroom 233	Winter	2023	12th Grade	Music	60	12	85	25	-25	625

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-2191.64	116046.90
55	2765	39.85	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value (Σd/N)	-39.85
M =Middle value	28714.51
O =Bottom Value	2970.00
P =Square root of M/O	3.11
T = (L/P)	-12.82
α = 0.05	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.728

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 7	Fall	2023	11th Grade	Art	60	78	88	28	-28	784
Classroom 39	Fall	2023	3rd Grade	Art	33.333	37	91	57.667	-57.667	3325.482889
Classroom 104	Winter	2023	10th Grade	Music	67	70	91	24	-24	576
Classroom 106	Winter	2023	7th Grade	Music	0	45	88	88	-88	7744
Classroom 107	Winter	2023	1st Grade	Art	83	55	89	6	-6	36
Classroom 109	Winter	2023	5th Grade	Art	32	23	52.8	20.8	-20.8	432.64
Classroom 110	Winter	2023	6th Grade	Music	35	25	50	15	-15	225
Classroom 115	Winter	2023	3rd Grade	Music	70	20	85	15	-15	225
Classroom 117	Winter	2023	10th Grade	Music	38.25	31	84.54	46.29	-46.29	2142.7641
Classroom 119	Winter	2023	7th Grade	Music	28	16	71	43	-43	1849
Classroom 121	Winter	2023	1st Grade	Music	35	56	77	42	-42	1764
Classroom 130	Winter	2023	3rd Grade	Music	42	92	76	34	-34	1156
Classroom 138	Winter	2023	7th Grade	Music	33.6	59	97.2	63.6	-63.6	4044.96
Classroom 147	Winter	2023	7th Grade	Music	75.67	46	83.58	7.91	-7.91	62.5681
Classroom 152	Winter	2023	6th Grade	Music	43	14	95	52	-52	2704
Classroom 154	Winter	2023	11th Grade	Music	66.11	73	90.54	24.43	-24.43	596.8249
Classroom 158	Winter	2023	8th Grade	Music	70	37	95	25	-25	625
Classroom 163	Winter	2023	12th Grade	Music	33.13	33	52.46	19.33	-19.33	373.6489
Classroom 184	Winter	2023	8th Grade	Music	62	32	90	28	-28	784
Classroom 232	Winter	2023	Kindergarten	Art	25	66	66	41	-41	1681
Classroom 233	Winter	2023	12th Grade	Music	60	12	85	25	-25	625

Number of Tests = N 21	Number of K-12 Students: 918	Average % Improvement: 33.62	-706.03	31756.89
			"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value (Σd/N)	-33.62
M =Middle value	8020.03
O =Bottom Value	420.00
P =Square root of M/O	4.37
T = (L/P)	-7.69
α = 0.05	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.679

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 23	Fall	2023	11th Grade	English	70	70	85	15	-15	225
Classroom 26	Fall	2023	9th Grade	English	78.7	44	80.8	2.1	-2.1	4.41
Classroom 111	Winter	2023	7th Grade	English	52.3	73	67.4	15.1	-15.1	228.01
Classroom 118	Winter	2023	7th Grade	English	12	135	80	68	-68	4624
Classroom 120	Winter	2023	9th Grade	English	73	25	82	9	-9	81
Classroom 122	Winter	2023	11th Grade	English	37.5	115	68.9	31.4	-31.4	985.96
Classroom 125	Winter	2023	11th Grade	English	16	99	82	66	-66	4356
Classroom 126	Winter	2023	7th Grade	English	41.9	70	92.1	50.2	-50.2	2520.04
Classroom 143	Winter	2023	12th Grade	English	65	15	72.9	7.9	-7.9	62.41
Classroom 146	Winter	2023	9th Grade	English	64.25	46	76.869	12.619	-12.619	159.239161
Classroom 161	Winter	2023	11th Grade	English	73	22	87	14	-14	196
Classroom 171	Winter	2023	7th Grade	English	49.8	20	84.2	34.4	-34.4	1183.36
Classroom 175	Winter	2023	8th Grade	English	50	118	75	25	-25	625
Classroom 193	Winter	2023	11th Grade	English	33.3	44	88.3	55	-55	3025
Classroom 198	Winter	2023	11th Grade	English	57.778	26	75.4	17.622	-17.622	310.534884

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-423.34	18585.96
15	921	28.22	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value ($\sum d/N$)	-28.22
M =Middle value	6638.12
O =Bottom Value	210.00
P =Square root of M/O	5.62
T = (L/P)	-5.02
$\alpha = 0.05$	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.296

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 24	Fall	2023	11th Grade	Mathematics	4.3	39	95	90.7	-90.7	8226.49
Classroom 46	Fall	2023	8th Grade	Mathematics	5	20	82.5	77.5	-77.5	6006.25
Classroom 52	Fall	2023	9th Grade	Mathematics	23	38	87	64	-64	4096
Classroom 113	Winter	2023	12th Grade	Mathematics	0	21	79	79	-79	6241
Classroom 116	Winter	2023	9th Grade	Mathematics	4	55	68	64	-64	4096
Classroom 123	Winter	2023	9th Grade	Mathematics	27	23	63	36	-36	1296
Classroom 133	Winter	2023	11th Grade	Mathematics	25	26	87	62	-62	3844
Classroom 150	Winter	2023	10th Grade	Mathematics	61.75	19	66	4.25	-4.25	18.0625
Classroom 165	Winter	2023	8th Grade	Mathematics	78.1	41	90.3	12.2	-12.2	148.84
Classroom 187	Winter	2023	11th Grade	Mathematics	19.5	17	95.5	76	-76	5776
Classroom 191	Winter	2023	11th Grade	Mathematics	20	40	83	63	-63	3969
Classroom 195	Winter	2023	9th Grade	Mathematics	26	20	52	26	-26	676
Classroom 227	Winter	2023	10th Grade	Mathematics	51.2	30	75.4	24.2	-24.2	585.64
Classroom 230	Winter	2023	11th Grade	Mathematics	8.4	76	64	55.6	-55.6	3091.36

Number of Tests = N 14	Number of K-12 Students: 464	Average % Improvement: 52.46	-734.45	48070.64
			"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value ($\sum d/N$)	-52.46
M =Middle value	9540.87
O =Bottom Value	182.00
P =Square root of M/O	7.24
T = (L/P)	-7.25
$\alpha = 0.05$	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.936

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 47	Fall	2023	10th Grade	Spanish	50.9	27	82	31.1	-31.1	967.21
Classroom 54	Fall	2023	10th Grade	Spanish	48	66	89.5	41.5	-41.5	1722.25
Classroom 112	Winter	2023	11th Grade	Spanish	60	31	78	18	-18	324
Classroom 114	Winter	2023	12th Grade	Spanish	10	118	92.6	82.6	-82.6	6822.76
Classroom 160	Winter	2023	10th Grade	Spanish	40.26	18	87.37	47.11	-47.11	2219.3521
Classroom 164	Winter	2023	10th Grade	Spanish	14	86	68.6	54.6	-54.6	2981.16
Classroom 194	Winter	2023	10th Grade	French	82.8	21	95.8	13	-13	169

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-287.91	15205.73
7	367	41.13	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value (Σd/N)	-41.13
M =Middle value	3363.99
O =Bottom Value	42.00
P =Square root of M/O	8.95
T = (L/P)	-4.60
α = 0.05	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.737

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 6	Fall	2023	10th Grade	Physical Education	46.1	100	86.588	40.488	-40.488	1639.278144
Classroom 40	Fall	2023	4th Grade	Physical Education	31.2	16	75	43.8	-43.8	1918.44
Classroom 51	Fall	2023	7th Grade	Physical Education	36	52	69	33	-33	1089
Classroom 178	Winter	2023	2nd Grade	Physical Education	65.62	16	79.76	14.14	-14.14	199.9396
Classroom 179	Winter	2023	12th Grade	Physical Education	30.4	35	93	62.6	-62.6	3918.76

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-194.03	8765.42
5	218	38.81	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value (Σd/N)	-38.81
M =Middle value	1236.04
O =Bottom Value	20.00
P =Square root of M/O	7.86
T = (L/P)	-4.94
α = 0.05	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-2.208

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 1	Fall	2023	4th Grade	Sciences	50	27	91	41	-41	1681
Classroom 3	Fall	2023	1st Grade	Sciences	20	19	68.42	48.42	-48.42	2344.4964
Classroom 4	Fall	2023	2nd Grade	Sciences	61.5	20	96	34.5	-34.5	1190.25
Classroom 5	Fall	2023	3rd Grade	Sciences	41	18	69	28	-28	784
Classroom 8	Fall	2023	7th Grade	Sciences	6	114	53	47	-47	2209
Classroom 9	Fall	2023	3rd Grade	Sciences	54.54	22	86.36	31.82	-31.82	1012.5124
Classroom 13	Fall	2023	Kindergarten	Sciences	51	9	98.81	47.81	-47.81	2285.7961
Classroom 15	Fall	2023	3rd Grade	Sciences	66	28	80	14	-14	196
Classroom 18	Fall	2023	3rd Grade	Sciences	58	28	70	12	-12	144
Classroom 19	Fall	2023	1st Grade	Sciences	82	16	93.4	11.4	-11.4	129.96
Classroom 21	Fall	2023	6th Grade	Sciences	5	18	80	75	-75	5625
Classroom 29	Fall	2023	3rd Grade	Sciences	40.6	24	63.5	22.9	-22.9	524.41
Classroom 30	Fall	2023	Kindergarten	Sciences	76	18	91	15	-15	225
Classroom 35	Fall	2023	Kindergarten	Sciences	62	18	83	21	-21	441
Classroom 37	Fall	2023	1st Grade	Sciences	85	21	85	0	0	0
Classroom 45	Fall	2023	4th Grade	Sciences	55	22	80.9	25.9	-25.9	670.81
Classroom 48	Fall	2023	5th Grade	Sciences	40	26	70.4	30.4	-30.4	924.16
Classroom 53	Fall	2023	1st Grade	Sciences	49.28	20	70.7	21.42	-21.42	458.8164
Classroom 55	Fall	2023	4th Grade	Sciences	0	15	63	63	-63	3969
Classroom 59	Fall	2023	3rd Grade	Sciences	53.08	26	95	41.92	-41.92	1757.2864
Classroom 60	Fall	2023	1st Grade	Sciences	50	17	58	8	-8	64
Classroom 62	Fall	2023	Kindergarten	Sciences	86.4	21	86.4	0	0	0
Classroom 63	Fall	2023	3rd Grade	Sciences	45	14	89	44	-44	1936
Classroom 67	Fall	2023	Kindergarten	Sciences	43.75	18	84.7	40.95	-40.95	1676.9025
Classroom 68	Fall	2023	1st Grade	Sciences	50	20	100	50	-50	2500
Classroom 70	Fall	2023	Kindergarten	Sciences	46	13	69	23	-23	529
Classroom 75	Fall	2023	3rd Grade	Sciences	35	21	77	42	-42	1764
Classroom 76	Fall	2023	1st Grade	Sciences	72	23	74	2	-2	4
Classroom 77	Fall	2023	2nd Grade	Sciences	66	19	90.1	24.1	-24.1	580.81
Classroom 78	Fall	2023	2nd Grade	Sciences	67	16	91	24	-24	576
Classroom 79	Fall	2023	2nd Grade	Sciences	76.8	22	97.14	20.34	-20.34	413.7156
Classroom 80	Fall	2023	4th Grade	Sciences	84	23	86	2	-2	4
Classroom 82	Fall	2023	2nd Grade	Sciences	65	22	83	18	-18	324
Classroom 83	Fall	2023	1st Grade	Sciences	26	21	90	64	-64	4096
Classroom 85	Fall	2023	Kindergarten	Sciences	92	19	97	5	-5	25
Classroom 86	Fall	2023	2nd Grade	Sciences	54	23	84	30	-30	900
Classroom 89	Fall	2023	Kindergarten	Sciences	70	17	100	30	-30	900
Classroom 90	Fall	2023	5th Grade	Sciences	53	11	70	17	-17	289
Classroom 93	Fall	2023	5th Grade	Sciences	7	22	75	68	-68	4624
Classroom 96	Fall	2023	3rd Grade	Sciences	29	22	76	47	-47	2209
Classroom 97	Fall	2023	Kindergarten	Sciences	50	16	75	25	-25	625
Classroom 98	Fall	2023	5th Grade	Sciences	61	10	83	22	-22	484
Classroom 99	Fall	2023	2nd Grade	Sciences	82	26	95	13	-13	169

Classroom 124	Winter	2023	5th Grade	Sciences	64.8	42	96	31.2	-31.2	973.44
Classroom 127	Winter	2023	1st Grade	Sciences	79	22	89	10	-10	100
Classroom 131	Winter	2023	2nd Grade	Sciences	2	26	75	73	-73	5329
Classroom 132	Winter	2023	5th Grade	Sciences	27	22	79	52	-52	2704
Classroom 134	Winter	2023	3rd Grade	Sciences	67	17	85	18	-18	324
Classroom 135	Winter	2023	9th Grade	Sciences	20	23	61	41	-41	1681
Classroom 136	Winter	2023	4th Grade	Sciences	67	21	95	28	-28	784
Classroom 137	Winter	2023	5th Grade	Sciences	4	18	69	65	-65	4225
Classroom 139	Winter	2023	9th Grade	Sciences	30	96	67	37	-37	1369
Classroom 140	Winter	2023	5th Grade	Sciences	61.99	19	81.87	19.88	-19.88	395.2144
Classroom 141	Winter	2023	6th Grade	Sciences	62	70	70	8	-8	64
Classroom 142	Winter	2023	1st Grade	Sciences	43.4	16	94.7	51.3	-51.3	2631.69
Classroom 144	Winter	2023	5th Grade	Sciences	22	41	59	37	-37	1369
Classroom 145	Winter	2023	4th Grade	Sciences	56	17	92	36	-36	1296
Classroom 148	Winter	2023	1st Grade	Sciences	25	17	86	61	-61	3721
Classroom 149	Winter	2023	2nd Grade	Sciences	55	20	85	30	-30	900
Classroom 151	Winter	2023	Kindergarten	Sciences	94	18	100	6	-6	36
Classroom 156	Winter	2023	4th Grade	Sciences	21	21	78	57	-57	3249
Classroom 157	Winter	2023	3rd Grade	Sciences	71	18	89	18	-18	324
Classroom 169	Winter	2023	3rd Grade	Sciences	27	18	94	67	-67	4489
Classroom 172	Winter	2023	4th Grade	Sciences	58	20	93	35	-35	1225
Classroom 176	Winter	2023	4th Grade	Sciences	59	20	82	23	-23	529
Classroom 177	Winter	2023	4th Grade	Sciences	17.73	16	61.65	43.92	-43.92	1928.9664
Classroom 182	Winter	2023	3rd Grade	Sciences	32	21	62	30	-30	900
Classroom 186	Winter	2023	9th Grade	Sciences	43	18	77.06	34.06	-34.06	1160.0836
Classroom 188	Winter	2023	10th Grade	Sciences	20	110	96	76	-76	5776
Classroom 190	Winter	2023	5th Grade	Sciences	31	23	78	47	-47	2209
Classroom 199	Winter	2023	5th Grade	Sciences	82.3	24	93.3	11	-11	121
Classroom 202	Winter	2023	10th Grade	Sciences	10	66	88.86	78.86	-78.86	6218.8996
Classroom 204	Winter	2023	Kindergarten	Sciences	48	15	87.5	39.5	-39.5	1560.25
Classroom 205	Winter	2023	2nd Grade	Sciences	30	19	73	43	-43	1849
Classroom 208	Winter	2023	5th Grade	Sciences	36.9	22	85.7	48.8	-48.8	2381.44
Classroom 209	Winter	2023	Kindergarten	Sciences	74	16	90	16	-16	256
Classroom 211	Winter	2023	5th Grade	Sciences	36.3	16	90	53.7	-53.7	2883.69
Classroom 213	Winter	2023	5th Grade	Sciences	23.3	20	73.25	49.95	-49.95	2495.0025
Classroom 214	Winter	2023	3rd Grade	Sciences	60	22	60	0	0	0
Classroom 217	Winter	2023	1st Grade	Sciences	69	17	78	9	-9	81
Classroom 218	Winter	2023	5th Grade	Sciences	67.15	21	84.66	17.51	-17.51	306.6001
Classroom 220	Winter	2023	3rd Grade	Sciences	31	26	60	29	-29	841
Classroom 222	Winter	2023	4th Grade	Sciences	52	23	62	10	-10	100
Classroom 223	Winter	2023	3rd Grade	Sciences	85	21	98.5	13.5	-13.5	182.25
Classroom 225	Winter	2023	3rd Grade	Sciences	53	15	86	33	-33	1089
Classroom 226	Winter	2023	1st Grade	Sciences	40.8	23	97.4	56.6	-56.6	3203.56
Classroom 231	Winter	2023	Kindergarten	Sciences	62.8	14	90	27.2	-27.2	739.84
Classroom 235	Winter	2023	Kindergarten	Sciences	72	22	93.5	21.5	-21.5	462.25
Classroom 236	Winter	2023	2nd Grade	Sciences	69.94	17	97.2	27.26	-27.26	743.1076
Classroom 237	Winter	2023	5th Grade	Sciences	40	32	76	36	-36	1296

Classroom 238	Winter	2023	1st Grade	Sciences	45	22	95	50	-50	2500
Classroom 241	Winter	2023	3rd Grade	Sciences	48	19	76	28	-28	784
Classroom 242	Winter	2023	2nd Grade	Sciences	72	20	90.5	18.5	-18.5	342.25
Classroom 244	Winter	2023	5th Grade	Sciences	42	23	95	53	-53	2809

Number of Tests = N	Number of K-12 Students:	Average % Improvement:	-3058.12	134203.46
94	2255	32.53	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

L =Top Value ($\sum d/N$)	-32.53
M =Middle value	34713.06
O =Bottom Value	8742.00
P =Square root of M/O	1.99
T = (L/P)	-16.33
$\alpha = 0.05$	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-1.684

Classroom Sample	Semester	Year	Grade-Level Assessed	Content Area Assessed	Pre-SCORE (X)	Number of P-12 Students	Post-SCORE (Y)	"Y-X" Change	"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
Classroom 2	Fall	2023	4th Grade	Social Studies	30	22	71	41	-41	1681
Classroom 11	Fall	2023	1st Grade	Social Studies	85	20	94	9	-9	81
Classroom 12	Fall	2023	3rd Grade	Social Studies	16.6	23	96.2	79.6	-79.6	6336.16
Classroom 14	Fall	2023	1st Grade	Social Studies	67	20	98	31	-31	961
Classroom 17	Fall	2023	5th Grade	Social Studies	20	16	67	47	-47	2209
Classroom 22	Fall	2023	8th Grade	Social Studies	53	39	85	32	-32	1024
Classroom 25	Fall	2023	3rd Grade	Social Studies	56	27	83	27	-27	729
Classroom 27	Fall	2023	9th Grade	Social Studies	18	36	87	69	-69	4761
Classroom 28	Fall	2023	Kindergarten	Social Studies	26	19	53	27	-27	729
Classroom 31	Fall	2023	3rd Grade	Social Studies	46.667	26	96.667	50	-50	2500
Classroom 32	Fall	2023	Kindergarten	Social Studies	23.6	17	47.2	23.6	-23.6	556.96
Classroom 33	Fall	2023	4th Grade	Social Studies	20	18	67	47	-47	2209
Classroom 34	Fall	2023	1st Grade	Social Studies	68.75	21	70.625	1.875	-1.875	3.515625
Classroom 36	Fall	2023	10th Grade	Social Studies	34.1	126	80.94	46.84	-46.84	2193.9856
Classroom 38	Fall	2023	12th Grade	Social Studies	19.7	57	62.7	43	-43	1849
Classroom 41	Fall	2023	5th Grade	Social Studies	40	26	79	39	-39	1521
Classroom 42	Fall	2023	9th Grade	Social Studies	12	81	60	48	-48	2304
Classroom 43	Fall	2023	5th Grade	Social Studies	37.88	22	70.33	32.45	-32.45	1053.0025
Classroom 44	Fall	2023	2nd Grade	Social Studies	55	17	86	31	-31	961
Classroom 49	Fall	2023	2nd Grade	Social Studies	20	17	75	55	-55	3025
Classroom 50	Fall	2023	2nd Grade	Social Studies	47	17	55	8	-8	64
Classroom 56	Fall	2023	4th Grade	Social Studies	39	9	86	47	-47	2209
Classroom 57	Fall	2023	2nd Grade	Social Studies	26	17	66	40	-40	1600
Classroom 58	Fall	2023	2nd Grade	Social Studies	42.85	24	91.6	48.75	-48.75	2376.5625
Classroom 61	Fall	2023	3rd Grade	Social Studies	24	23	85.2	61.2	-61.2	3745.44
Classroom 64	Fall	2023	Kindergarten	Social Studies	58	15	73	15	-15	225
Classroom 65	Fall	2023	Kindergarten	Social Studies	55	20	82.5	27.5	-27.5	756.25
Classroom 66	Fall	2023	5th Grade	Social Studies	10	22	45	35	-35	1225
Classroom 69	Fall	2023	2nd Grade	Social Studies	75	20	98	23	-23	529
Classroom 71	Fall	2023	3rd Grade	Social Studies	38	22	92	54	-54	2916
Classroom 72	Fall	2023	1st Grade	Social Studies	63.33	27	94	30.67	-30.67	940.6489
Classroom 73	Fall	2023	2nd Grade	Social Studies	1	15	51.25	50.25	-50.25	2525.0625
Classroom 74	Fall	2023	2nd Grade	Social Studies	53.8	16	71.5	17.7	-17.7	313.29
Classroom 81	Fall	2023	5th Grade	Social Studies	36	24	81	45	-45	2025
Classroom 84	Fall	2023	1st Grade	Social Studies	40	25	79	39	-39	1521
Classroom 87	Fall	2023	3rd Grade	Social Studies	5	23	32	27	-27	729
Classroom 88	Fall	2023	2nd Grade	Social Studies	8.5	16	59	50.5	-50.5	2550.25
Classroom 91	Fall	2023	3rd Grade	Social Studies	5.78	17	59	53.22	-53.22	2832.3684
Classroom 92	Fall	2023	5th Grade	Social Studies	28	18	53.7	25.7	-25.7	660.49
Classroom 94	Fall	2023	5th Grade	Social Studies	32	19	62	30	-30	900
Classroom 95	Fall	2023	5th Grade	Social Studies	19.7	37	41.35	21.65	-21.65	468.7225
Classroom 100	Fall	2023	2nd Grade	Social Studies	12	18	21	9	-9	81
Classroom 101	Fall	2023	Kindergarten	Social Studies	60	17	90	30	-30	900
Classroom 102	Fall	2023	5th Grade	Social Studies	30	27	96.6	66.6	-66.6	4435.56

Classroom 103	Fall	2023	5th Grade	Social Studies	9.56	23	70.4	60.84	-60.84	3701.5056
Classroom 105	Winter	2023	9th Grade	Social Studies	11	67	30	19	-19	361
Classroom 108	Winter	2023	10th Grade	Social Studies	56.25	30	87.5	31.25	-31.25	976.5625
Classroom 128	Winter	2023	5th Grade	Social Studies	48.4	20	83	34.6	-34.6	1197.16
Classroom 129	Winter	2023	9th Grade	Social Studies	65	79	87	22	-22	484
Classroom 153	Winter	2023	8th Grade	Social Studies	48	55	98.2	50.2	-50.2	2520.04
Classroom 155	Winter	2023	3rd Grade	Social Studies	44.2	23	95.3	51.1	-51.1	2611.21
Classroom 159	Winter	2023	11th Grade	Social Studies	49	68	74	25	-25	625
Classroom 162	Winter	2023	9th Grade	Social Studies	13.8	19	84.7	70.9	-70.9	5026.81
Classroom 166	Winter	2023	7th Grade	Social Studies	11	113	72	61	-61	3721
Classroom 167	Winter	2023	Kindergarten	Social Studies	74	20	64	-10	10	100
Classroom 168	Winter	2023	5th Grade	Social Studies	40	18	70	30	-30	900
Classroom 170	Winter	2023	3rd Grade	Social Studies	36	15	63	27	-27	729
Classroom 173	Winter	2023	5th Grade	Social Studies	19	24	81	62	-62	3844
Classroom 174	Winter	2023	5th Grade	Social Studies	1.5	21	62.5	61	-61	3721
Classroom 180	Winter	2023	3rd Grade	Social Studies	50	12	100	50	-50	2500
Classroom 183	Winter	2023	5th Grade	Social Studies	35	19	81.75	46.75	-46.75	2185.5625
Classroom 185	Winter	2023	3rd Grade	Social Studies	16.25	17	75	58.75	-58.75	3451.5625
Classroom 189	Winter	2023	11th Grade	Social Studies	72.3	49	87.5	15.2	-15.2	231.04
Classroom 192	Winter	2023	10th Grade	Social Studies	30	89	80	50	-50	2500
Classroom 196	Winter	2023	10th Grade	Social Studies	58	25	79	21	-21	441
Classroom 197	Winter	2023	8th Grade	Social Studies	30	90	90	60	-60	3600
Classroom 200	Winter	2023	7th Grade	Social Studies	48	70	80	32	-32	1024
Classroom 201	Winter	2023	11th Grade	Social Studies	65.71	21	95.8	30.09	-30.09	905.4081
Classroom 203	Winter	2023	6th Grade	Social Studies	30	19	53	23	-23	529
Classroom 206	Winter	2023	1st Grade	Social Studies	90	17	93	3	-3	9
Classroom 207	Winter	2023	1st Grade	Social Studies	50	18	93	43	-43	1849
Classroom 210	Winter	2023	5th Grade	Social Studies	26	17	62	36	-36	1296
Classroom 212	Winter	2023	2nd Grade	Social Studies	40	16	83	43	-43	1849
Classroom 215	Winter	2023	4th Grade	Social Studies	0	17	84	84	-84	7056
Classroom 216	Winter	2023	5th Grade	Social Studies	15.82	18	37.96	22.14	-22.14	490.1796
Classroom 219	Winter	2023	4th Grade	Social Studies	46	22	83	37	-37	1369
Classroom 221	Winter	2023	5th Grade	Social Studies	44.4	32	92.7	48.3	-48.3	2332.89
Classroom 224	Winter	2023	3rd Grade	Social Studies	0	21	36	36	-36	1296
Classroom 228	Winter	2023	3rd Grade	Social Studies	28	23	74	46	-46	2116
Classroom 229	Winter	2023	8th Grade	Social Studies	28	57	89	61	-61	3721
Classroom 234	Winter	2023	2nd Grade	Social Studies	54	20	80.6	26.6	-26.6	707.56
Classroom 239	Winter	2023	1st Grade	Social Studies	48.98	22	78.88	29.9	-29.9	894.01
Classroom 240	Winter	2023	3rd Grade	Social Studies	43	20	75	32	-32	1024
Classroom 243	Winter	2023	5th Grade	Social Studies	0.05	5	81.25	81.2	-81.2	6593.44

Number of Tests = N	Number of K-12 Students:	Average % Improvement:
84	2456	38.67

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

-3247.93	153705.21
"X-Y" or "ED"	"(X-Y)^2" or "ED^2"
L =Top Value ($\sum d/N$)	-38.67
M =Middle value	28121.68
O =Bottom Value	6972.00
P =Square root of M/O	2.01
T = (L/P)	-19.25
$\alpha = 0.05$	Critical T = 1.645
	Significant
T/Square Root of N = Effect	-2.101