

Skor Tiap Indikator Keterampilan Proses Sains

Pre-Test Kelas Kontrol (8A)

Nomor Soal	Nama Siswa																																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	Af	
1	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	0	1	0	1	1	1	0	0	1	1	1	1	0		
2	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	1	1	1	0	0	0	1	0	1	0	0	0	0	0	1	1
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1
5	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	0	1	1	1	1	0	1	1
6	0	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	0	0	1	0	0	0	0	1	1	0	1	1	
7	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
8	1	0	0	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1
9	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	
10	1	1	0	0	1	1	1	1	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
11	1	1	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	0	0	1	1	1	1	0	1	0	1	1	1	0	1	1	
12	0	1	0	0	0	0	1	1	1	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	1	1	0	0
13	0	1	0	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	0	0	1	
14	0	1	0	0	1	1	0	0	0	0	1	1	0	1	1	1	0	0	1	0	0	1	0	0	0	1	0	1	1	0	1	0	
15	1	1	0	1	1	1	1	0	0	1	0	0	0	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	1	0	1	1	
16	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	
17	1	1	1	0	1	1	1	0	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	
18	0	0	0	1	1	1	1	0	0	1	0	1	0	0	1	1	0	1	1	0	1	0	0	1	0	0	0	1	0	1	1	1	
19	0	1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	1	0	1	1	1	0	0	0	
20	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	0	1	1	1	0	0	0	
21	1	1	0	0	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0	0	1	
22	0	1	1	0	0	0	1	1	1	1	0	0	1	1	0	0	0	0	1	1	1	1	1	0	1	1	1	0	1	1	0	1	

Nomor Soal	Nama Siswa	Jumlah Tiap Soal	Jumlah Tiap Indikator
	AG		
1	1	25	36
2	0	11	
3	1	33	51
4	1	18	
5	1	25	44
6	0	19	
7	1	31	58
8	1	27	
9	0	29	56
10	1	27	
11	0	19	32
12	1	13	
13	1	24	38
14	0	14	
15	0	21	51
16	1	30	
17	0	24	40
18	0	16	
19	0	10	18
20	0	8	
21	0	23	43
22	1	20	

Skor Tiap Indikator Keterampilan Proses Sains

Pre-Test Kelas Eksperimen (8C)

Nomor Soal	Nama Siswa																															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	Af
1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	1	1	1	1
2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	1	0	0	1	0	1	1
3	1	1	0	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	0	1	0	1	0	1	0	1	0	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	0	0
5	0	1	0	1	0	0	0	0	0	1	0	1	1	1	1	0	0	1	0	1	0	0	1	1	1	0	1	0	0	0	1	1
6	0	1	1	1	1	0	0	0	0	1	1	0	1	1	1	1	0	0	1	0	1	0	0	1	0	1	1	0	1	1	1	1
7	1	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	0	0	1	0	0	0	0	0	0	1	1	0	1	1	1	0	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1
9	0	0	0	1	0	1	0	1	0	0	0	1	1	1	0	0	0	0	1	0	1	0	0	1	1	0	1	0	1	0	0	1
10	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	0	0	0	1	0	0	0	1	0	0	1	0	1	1	0	1	1	1	0	0	0	0	1	0	1	1	0	1	0	1	0
13	0	1	1	1	0	1	0	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0	1	1	1	1
14	1	1	1	0	1	0	0	0	1	0	0	0	0	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	0	1	1	0
15	0	1	0	1	0	0	0	0	0	1	0	0	1	1	1	0	1	0	1	0	1	0	0	0	1	1	0	0	1	1	0	1
16	0	1	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1
17	1	1	0	1	1	0	1	1	0	0	1	0	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
18	0	0	1	1	1	0	1	0	0	0	1	0	1	1	0	1	0	0	1	0	1	0	0	1	1	1	1	1	1	0	1	1
19	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	1	0	0	1	0	0	1	0	1	0	1	0
20	1	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	1	0	0	0	0	1	0	1
21	0	0	0	1	0	1	0	1	1	0	0	0	0	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0
22	1	0	0	1	1	1	1	1	0	0	1	0	0	0	1	0	0	0	1	1	0	0	1	1	1	1	1	1	0	1	1	1

Nomor Soal	Nama Siswa		Jumlah Tiap Soal	Jumlah Tiap Indikator
	AG	AH		
1	1	1	13	24
2	0	0	11	
3	0	1	28	51
4	1	0	23	
5	0	1	16	37
6	1	1	21	
7	1	1	30	48
8	1	1	18	
9	0	1	14	44
10	1	1	30	
11	1	0	30	44
12	0	0	14	
13	1	1	24	44
14	0	1	20	
15	0	1	15	41
16	0	1	26	
17	1	0	25	45
18	1	1	20	
19	0	0	10	21
20	0	0	11	
21	0	0	9	30
22	1	1	21	

Skor Tiap Indikator Keterampilan Proses Sains

Post-Test Kelas Kontrol (8A)

Nomor Soal	Nama Siswa																																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	Af	
1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	
2	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	1	1	1	0	0	0	0	0	1	0	0	1
3	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	
4	0	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	0	1	0	1	1	1	1	1	0	0	1	1	0	1	
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	
6	1	1	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	1	1	0	0	0	1	1	1	1	0	1	1	
7	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	
8	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	
9	0	1	1	0	0	1	1	0	0	0	1	1	0	1	0	1	0	1	0	1	0	1	0	0	1	1	1	1	1	0	0	0	1
10	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	
11	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	1	0	1	0	0	1	1	1	1	1	0	1	
12	1	1	0	0	0	0	1	0	0	1	1	1	0	1	0	0	0	1	0	1	1	1	0	0	1	0	1	1	1	0	1	1	
13	1	1	1	0	0	1	1	0	0	1	1	1	0	1	0	0	1	1	0	1	1	0	0	0	1	1	1	1	1	0	1	1	
14	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	
15	1	1	1	1	1	1	1	1	0	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	
16	1	1	1	1	0	1	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	
17	0	1	0	1	0	1	1	1	0	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	
18	1	1	1	1	0	1	1	0	0	1	0	1	1	1	0	1	0	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	
19	1	0	0	1	1	1	1	1	1	0	1	0	0	0	1	0	1	0	0	0	1	0	1	1	0	0	0	1	0	0	0	1	
20	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
21	1	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	0	1	0	1	0	1	0	1	
22	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Nomor Soal	Nama Siswa	Jumlah Tiap Soal	Jumlah Tiap Indikator
	AG		
1	1	29	50
2	1	21	
3	1	30	54
4	1	24	
5	1	31	50
6	0	19	
7	1	31	60
8	1	29	
9	0	17	46
10	1	29	
11	1	26	43
12	0	17	
13	0	20	26
14	0	6	
15	0	27	53
16	0	26	
17	0	23	46
18	0	23	
19	1	16	46
20	1	30	
21	1	12	43
22	1	31	

Skor Tiap Indikator Keterampilan Proses Sains

Post-Test Kelas Eksperimen (8C)

Nomor Soal	Nama Siswa																															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	Af
1	1	1	0	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1
4	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	0	1	1
5	1	0	0	1	1	1	1	1	0	1	1	0	1	1	0	1	1	1	0	0	1	1	1	1	1	0	0	0	1	1	1	1
6	1	1	0	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	0	1	0	1	1	1
8	1	0	1	1	1	1	0	0	1	1	1	1	0	1	1	0	1	1	1	0	0	1	1	1	1	1	0	0	1	1	1	1
9	0	1	1	1	0	1	1	1	1	1	0	1	1	1	0	1	0	1	1	1	1	0	0	1	0	1	1	1	0	0	1	1
10	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
11	1	1	0	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1
12	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1
14	1	1	0	1	1	0	1	0	1	1	1	1	1	0	0	1	1	1	1	1	0	0	0	1	0	1	0	0	0	1	0	1
15	1	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	1	0	1	1	1
16	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1
17	1	0	1	1	1	0	0	1	1	1	1	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	0	1	1	1
18	1	0	1	1	0	1	1	1	1	0	1	0	1	1	1	0	0	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1
19	1	1	1	1	1	0	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1
20	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	0	1	1	0	1
22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1

Nomor Soal	Nama Siswa		Jumlah Tiap Soal	Jumlah Tiap Indikator
	AG	AH		
1	1	1	30	62
2	1	1	32	
3	1	1	32	53
4	0	1	21	
5	1	1	25	56
6	1	1	31	
7	1	0	28	53
8	1	1	25	
9	1	1	24	54
10	1	1	30	
11	1	1	28	58
12	1	1	30	
13	0	1	29	50
14	0	1	21	
15	1	1	27	56
16	1	1	29	
17	1	1	21	47
18	1	1	26	
19	1	1	27	58
20	1	1	31	
21	1	1	30	62
22	1	1	32	

PERHITUNGAN NILAI N-GAIN PADA KELAS KONTROL BERDASARKAN TIAP INDIKATOR

Tabel 1. Data Nilai N-Gain Kelas Kontrol (VIII-A) SMPN 1 Beji

No.	Indikator	Nilai		Post – Pre	Skor Max – Pre (66 – Pre)	Skor N-Gain	Kategori
		Pre-test	Post-test				
1.	Mengamati	36	50	14	30	0.46	Sedang
2.	Mengelompokkan	51	54	3	15	0.20	Rendah
3.	Merumuskan masalah	44	50	6	22	0.27	Rendah
4.	Merumuskan hipotesis	58	60	2	8	0.25	Rendah
5.	Mengaplikasikan pola	56	46	-10	10	-1.00	Rendah
6.	Merencanakan percobaan	32	43	11	34	0.32	Sedang
7.	Menentukan alat dan bahan	38	26	-12	28	-0.42	Sedang
8.	Melakukan percobaan	51	53	2	15	0.13	Rendah
9.	Mengomunikasikan	40	46	6	26	0.23	Rendah
10.	Menginterpretasikan	18	46	28	48	0.58	Sedang
11.	Memprediksi	43	43	0	23	0	Rendah
Rata-Rata						0.09	Rendah

**PERHITUNGAN NILAI N-GAIN PADA KELAS EKSPERIMEN
BERDASARKAN TIAP INDIKATOR**

Tabel 1. Data Nilai N-Gain Kelas Eksperimen (VIII-C) SMPN 1 Beji

No.	Indikator	Nilai		Post – Pre	Skor Max – Pre (68 – Pre)	Skor N-Gain	Kategori
		Pre-test	Post-test				
1.	Mengamati	24	62	38	44	0.86	Tinggi
2.	Mengelompokkan	51	53	2	17	0.12	Rendah
3.	Merumuskan masalah	37	56	19	31	0.61	Sedang
4.	Merumuskan hipotesis	48	53	5	20	0.25	Rendah
5.	Mengaplikasikan pola	44	54	10	24	0.42	Sedang
6.	Merencanakan percobaan	44	58	14	24	0.58	Sedang
7.	Menentukan alat dan bahan	44	50	6	24	0.25	Rendah
8.	Melakukan percobaan	41	56	15	27	0.55	Sedang
9.	Mengomunikasikan	45	47	2	23	0.08	Rendah
10.	Menginterpretasikan	21	58	37	47	0.78	Tinggi
11.	Memprediksi	30	62	32	38	0.84	Tinggi
Rata-Rata						0.48	Sedang