

## REPORTER

Start from 1 and add/subtract

$$1 + 3 + 2 - 0.75 = 5$$



## SCORESHEET

Fight 3 E, Stage: 1, Problem No. 12

Rep: Slovak YPT H. Hepe &amp; K.

sign

Opp: Germany Rosenheim Q. K.

Rev: Gymnasium Freistadt

Worm, Paul

A. Penepparday

## REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3	good	good	well performed, sufficient number	deviations	+ some interesting results	some aspects above average	some parts well done
4	detailed demonstrative	quite detailed, correct	+ results explained, errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

## DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	+ data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

## ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

## NOTES:

Lorentz force in wrong direction  
gyroscope not tested only disc

$$\vec{v} \times \vec{B} \rightarrow F_L(B \times v)$$

## OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 1.5 + 1.5 - 0.5 = 4$$

## QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, aimed at resolving unclear points in the report
- 2 + short, apt and clear, well prioritized, all time used

## OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	main points	some	some correct	reasonable	fair
3	all relevant points	many	many correct	fair	efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

## DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	some	some correct	good	reasonable
3	good	many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

## ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

## NOTES:

Some u.s conception about Lorentz force

## REVIEWER

Start from 1 and add/subtract

$$1 + 0 + 1 + 1.25 + 0.25 + 0 - 0 = 4$$

## QUESTIONS ASKED

- 0 too few, mostly irrelevant
- 1 relevant, meant to clarify unclear points
- 2 + suitably allotted to Rep & Opp, most time used
- 3 + short, apt and clear, well prioritized, time managed efficiently

## REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	partial	partially relevant	some
2	good	mostly adequate	reasonable
3	detailed, complex	fully adequate	good

## REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	some
2	informative, apt	mostly adequate	reasonable
3	condensed & accurate	fully adequate	good

## DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	almost no	too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

## MISSED POINTS POINTED OUT

- 0 irrelevant
- 1 none
- 2 relevant, constructive

## ANSWERS TO JURY QUESTIONS

- 0 concise and correct or no questions asked
- 1 some incorrect, inconclusive or too long
- 2 deeply incorrect or show deep misconceptions

NOTES: too generic

# REPORTER

Start from 1 and add/subtract

$$1 + 4.5 + 2.5 - 0 = 8$$



# SCORESHEET

Fight 3 E, Stage: 1, Problem No. 12

sign

Klingenböck, Anna Maria

Rep: Slovak YPT Heinrich H.

Opp: Germany Rosenheim Quirin Rev: Gymnasium Freistadt Alina P.

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	too few	poor	0 <input checked="" type="checkbox"/> concise and correct or no questions asked 1 some incorrect, inconclusive or too long -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 some	some	some	some	review of sources, cited	partly	partly clear	some	some aspects fine	
2 fair	fair	fair	not well fitting	some own input	average	average	many	good	
3 good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	+ data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	X quite detailed, correct	X results explained errors analysed	X + theory limits explained, conclusive	X considerable experimental or theoretical	X interesting solution	X overall clear, demonstrative			
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated	proved deep understanding	overall efficient	

NOTES: - error of model was missing  
- missing parameters

- no gyroscope

- clarifying of formulas not optimal  
+ other answers very good (with data!)

# OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 1.5 + 2.5 - 0.5 = 5$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0	too few, mostly irrelevant	almost nothing	no or irrelevant	too few	no	poor	almost no	too few	poor	no	0 concise and correct or no questions asked X some incorrect, inconclusive or too long -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1	X relevant, aimed at resolving unclear points in the report	some main points	few	some	some	reasonable	few	some	some aspects fine	some	
2	+ short, apt and clear, well prioritized, all time used	X main points	X some	X some correct	X reasonable	X fair	X some	X some correct	X good	X reasonable	
		all relevant points	many	many correct	fair	efficient	X good	many correct	some aspects efficient	fair	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES: few questions

good summary

+ good questions  
+ interesting discussion

# REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 + 1 - 0 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0	too few, mostly irrelevant	poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	almost no	too few	-1 irrelevant	0 <input checked="" type="checkbox"/> concise and correct or no questions asked 1 some incorrect, inconclusive or too long -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1	X relevant, meant to clarify unclear points	partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	0 none	
	+ suitably allotted to Rep & Opp, most time used	X good	X mostly adequate	X reasonable	X informative, apt	X mostly adequate	X reasonable	X relevant parts	X many	1 relevant, constructive	
2	+ short, apt and clear, well prioritized, time managed efficiently	detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate		

NOTES: - shorter questions

- good summary



# REPORTER

Start from 1 and add/subtract

$$1 + 5,5 + 2 - 0 = 9$$



# SCORESHEET

Fight 3 E, Stage: 1, Problem No. 12

sign

Tao

Poier, Peter

Rep: Slovak YPT

Opp: Germany Rosenheim

Rev: Gymnasium Freistadt

REPORT								DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication		relevant arguments/responses	reporter's conduct at the discussion	
0 --- almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic		too few	poor	0 --- ✗ concise and correct or no questions asked
1 --- some	some	some	some	review of sources, cited	partly	partly clear		some	some aspects fine	
2 --- fair	fair	fair	not well fitting	some own input	average	average		many	good	1 --- some incorrect, inconclusive or too long
3 --- good	good	well performed, sufficient number	deviations	+ some interesting results	some aspects above average	some parts well done		+ data/theory convincingly supported	some aspects efficient	
4 --- detailed demonstrative	✗ quite detailed, correct	✗ results explained errors analysed	✗ + theory limits explained, conclusive	✗ considerable experimental or theoretical	✗ interesting solution	✗ overall clear, demonstrative		proved deep understanding	overall efficient	-1 --- deeply incorrect or show deep misconceptions
5 --- deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated				
6 ---										
7 ---										

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 2 + 2,5 - 0 = 7$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 --- too few, mostly irrelevant		almost nothing	no or irrelevant	too few	no	poor	almost no	too few	poor	no	0 --- ✗ concise and correct or no questions asked
1 --- ✗ relevant, aimed at resolving unclear points in the report		some main points	few	some	some	reasonable	few	some	some aspects fine	some	
2 --- + short, apt and clear, well prioritized, all time used		main points	some	some correct	reasonable	fair	some	some correct	good	reasonable	-1 --- some incorrect, inconclusive or too long
		all relevant points	many	many correct	fair	efficient	good	many correct	some aspects efficient	fair	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	new crucial point(s)	+ improvement suggestions	overall efficient	very good	-2 --- deeply incorrect or show deep misconceptions

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1,5 + 1,5 + 0 + 0 - 0 = 5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 --- too few, mostly irrelevant		poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	✗ almost no	✗ too few	-1 --- irrelevant	0 --- ✗ concise and correct or no questions asked
1 --- ✗ relevant, meant to clarify unclear points		partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	0 --- ✗ none	
2 --- + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	informative, apt	mostly adequate	reasonable	relevant parts	many	1 --- relevant, constructive	-1 --- some incorrect, inconclusive or too long
3 --- + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate		
											-2 --- deeply incorrect or show deep misconceptions

NOTES:

# REPORTER

Start from 1 and add/subtract

$$1 + 5,5 + 2,75 - 0 = 9,25 \quad 9$$



# SCORESHEET

Fight 3 E, Stage: 1, Problem No. 12

sign

Schweitzer, Susanne

Rep: Slovak YPT

Opp: Germany Rosenheim

Rev: Gymnasium Freistadt

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 too few	poor	0 / concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 some	some	some	some	review of sources, cited	partly	partly clear	1 some	some aspects fine	
2 fair	fair	fair	not well fitting	some own input	average	average	2 many	good	
3 good	good	well performed, sufficient number	deviations	+ some interesting results	some aspects above average	some parts well done	3 + data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	4 proved deep understanding	overall efficient	
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 1,25 + 3 + 3,5 - 8,0 = 8,75 \quad 9$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant		almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 / concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 relevant, aimed at resolving unclear points in the report		some main points	few	some	some	reasonable	1 some	some correct	some aspects fine	some	
2 + short, apt and clear, well prioritized, all time used		main points	some	some correct	reasonable	fair	2 good	many correct	some aspects efficient	fair	
		all relevant points	many	many correct	fair	efficient	3 new crucial point(s)	+ improvement suggestions	overall efficient	very good	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used					

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 + 0 + 0 - 0 = 6$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant		poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 / concise and correct or no questions asked -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 relevant, meant to clarify unclear points		partial	partially relevant	some	1 too short/long	partially relevant	some	1 too short/long	some	0 none	
2 + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	2 informative, apt	mostly adequate	reasonable	2 relevant parts	many	1 relevant, constructive	
3 + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate		

NOTES:



# REPORTER

Start from 1 and add/subtract

$$1 + 6 + 25 - 0.5 = 9$$



# SCORESHEET

Fight 3 E, Stage: 1, Problem No. \_\_\_\_\_

sign *Martin Taz.*

Tazreiter, Martin

Rep: Slovak YPT

Opp: Germany Rosenheim

Rev: Gymnasium Freistadt

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 too few	poor	0 concise and correct or no questions asked
1 some	some	some	some	review of sources, cited	partly	partly clear	1 some	some aspects fine	1 some incorrect, inconclusive or too long
2 fair	fair	fair	not well fitting	some own input	average	average	2 many	good	2 deeply incorrect or show deep misconceptions
3 good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	3 + data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative			
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 1.5 + 2.5 + 2.5 - 0.5 = 8$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant		almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 concise and correct or no questions asked
1 relevant, aimed at resolving unclear points in the report		some main points	few	some	some	reasonable	1 few	some	some aspects fine	some	1 some incorrect, inconclusive or too long
2 + short, apt and clear, well prioritized, all time used		main points	some	some correct	reasonable	fair	2 some	some correct	good	reasonable	2 deeply incorrect or show deep misconceptions
		all relevant points	many	many correct	fair	efficient	3 good	many correct	some aspects efficient	fair	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 0.5 + 1.5 + 1.5 + 0.5 + 0 - 0 = 5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant		poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 concise and correct or no questions asked
1 relevant, meant to clarify unclear points		partial	partially relevant	some	1 too short/long	partially relevant	some	1 too short/long	some	0 none	1 some incorrect, inconclusive or too long
2 + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	2 informative, apt	mostly adequate	reasonable	2 relevant parts	many	1 relevant, constructive	2 deeply incorrect or show deep misconceptions
3 + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate		

NOTES:

# REPORTER

Start from 1 and add/subtract

$$1 + 6 + 2,5 - 0,5 = 9$$



# SCORESHEET

Fight 3 E, Stage: 1, Problem No. 12

sign

*Lisa Weiß*

Weiß, Lisa

Rep: Slovak YPT Heinrich Hegedus

Opp: Germany Rosenheim

Rev: Gymnasium Freistadt

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 too few	poor	0 concise and correct or no questions asked
1 some	some	some	some	review of sources, cited	partly	partly clear	1 some	some aspects fine	1 some incorrect, inconclusive or too long
2 fair	fair	fair	not well fitting	some own input	average	average	2 many	good	2 deeply incorrect or show deep misconceptions
3 good	good	well performed, sufficient number	deviations	+ some interesting results	some aspects above average	some parts well done	3 + data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative			
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated	6 proved deep understanding	overall efficient	

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 0,5 + 2,5 + 2 - 0,5 = 6$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant	0	almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 concise and correct or no questions asked
1 relevant, aimed at resolving unclear points in the report	1	some main points	few	some	some	reasonable	1 few	some	some aspects fine	some	1 some incorrect, inconclusive or too long
2 + short, apt and clear, well prioritized, all time used	2	main points	some	some correct	reasonable	fair	2 some	some correct	good	reasonable	2 deeply incorrect or show deep misconceptions
	3	all relevant points	many	many correct	fair	efficient	3 good	many correct	some aspects efficient	fair	
	4	practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 0,75 + 1,5 + 1 + 1 + 0 - 0 = 5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant	0	poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 concise and correct or no questions asked
1 relevant, meant to clarify unclear points	1	partial	partially relevant	some	1 too short/long	partially relevant	some	1 too short/long	some	0 none	1 some incorrect, inconclusive or too long
2 + suitably allotted to Rep & Opp, most time used	2	good	mostly adequate	reasonable	2 informative, apt	mostly adequate	reasonable	2 relevant parts	many	1 relevant, constructive	2 deeply incorrect or show deep misconceptions
3 + short, apt and clear, well prioritized, time managed efficiently	3	detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate		

NOTES:



## REPORTER

Start from 1 and add/subtract

$$1 + 3 + 1.25 - 0 = 5$$



## SCORESHEET

Fight 3 E, Stage: 2, Problem No. *5*Rep: Germany Rosenheim *M. Kober*Opp: Gymnasium Freistadt *A. K.*Rev: Slovak YPT *M. Kober*

Worm, Paul

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 — almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 — too few	poor	0 <i>0</i> concise and correct or no questions asked — some incorrect, inconclusive or too long -1 — deeply incorrect or show deep misconceptions
1 — some	some	some	some	review of sources, cited	partly	partly clear	1 — some	some aspects fine	
2 — fair <i>X</i>	fair <i>X</i>	fair <i>X</i>	not well fitting	some own input	average <i>X</i>	average <i>X</i>	2 — many <i>X</i>	good <i>X</i>	
3 — good	good	well performed, sufficient number	deviations <i>X</i>	+ some interesting results <i>X</i>	some aspects above average	some parts well done	3 — + data/theory convincingly supported	some aspects efficient	
4 — detailed demonstrative	quite detailed, correct	+ results explained errors analysed	qualitatively analysed	considerable experimental or theoretical	interesting solution	overall clear, demonstrative			
5 — deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	+ theory limits explained, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated	2 — proved deep understanding	overall efficient	
6 —			well fitting, deviations analysed, conclusive				3 —		
7 —									

NOTES:

## OPPONENT

Start from 1 and add/subtract

$$1 + 0 + 2.25 + 1.25 - 0 = 5$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 <i>0</i> — too few, mostly irrelevant		0 — almost nothing	no or irrelevant	too few	no	poor	0 — almost no	too few	poor	no	0 <i>0</i> concise and correct or no questions asked — some incorrect, inconclusive or too long -1 — deeply incorrect or show deep misconceptions
1 — relevant, aimed at resolving unclear points in the report		1 — some main points	few	some <i>X</i>	some	reasonable <i>X</i>	1 — few <i>X</i>	some <i>X</i>	some aspects fine	some <i>X</i>	
2 — + short, apt and clear, well prioritized, all time used		2 — main points	some	some correct	reasonable <i>X</i>	fair	2 — some <i>X</i>	some correct	good <i>X</i>	reasonable	
		3 — all relevant points <i>X</i>	many	many correct	fair	efficient	3 — good	many correct	some aspects efficient	fair	
		4 — practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 — new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

Some inconsistencies with pros/cons

## REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 3 + 2.25 + 1 = 7.75$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 — too few, mostly irrelevant		0 — poor/wrong	irrelevant	no	0 — poor/wrong	irrelevant	no	0 — almost no	too few	-1 — irrelevant	0 <i>0</i> concise and correct or no questions asked — some incorrect, inconclusive or too long -1 — deeply incorrect or show deep misconceptions
1 — relevant, meant to clarify unclear points		1 — partial	partially relevant	some	1 — too short/long	partially relevant	some	1 — too short/long	some	0 — none	
2 <i>0</i> — + suitably allotted to Rep & Opp, most time used		2 — good	mostly adequate	reasonable	2 — informative, apt	mostly adequate	reasonable	2 — relevant parts <i>X</i>	many <i>0</i>	1 <i>0</i> relevant, constructive	
3 — + short, apt and clear, well prioritized, time managed efficiently		3 — detailed, complex <i>X</i>	fully adequate <i>X</i>	good <i>X</i>	3 — condensed & accurate	fully adequate	good	3 — accurate, conclusive	fully adequate		

NOTES: Excellent review

# REPORTER

Start from 1 and add/subtract

$$1 + 5 + 1 - 0 = 7$$



# SCORESHEET

Fight 3 E, Stage: 2, Problem No. 9

sign *A*

Klingenböck, Anna Maria

Rep: Germany Rosenheim *Ullrich* Opp: Gymnasium Freistadt *Anna* Rev: Slovak YPT *Maroš*

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS	
	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses		reporter's conduct at the discussion
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	too few	poor	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1	some	some	some	some	review of sources, cited	partly	partly clear	some	some aspects fine	
2	fair	fair	fair	not well fitting	some own input	average	average	many	good	-1 <input type="checkbox"/> some incorrect, inconclusive or too long
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	+ data/theory convincingly supported	some aspects efficient	
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	proved deep understanding	overall efficient	-2 <input type="checkbox"/> deeply incorrect or show deep misconceptions
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES: + many ideas what to investigate

# OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 2 + 1 - 0 = 4$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0	<input checked="" type="checkbox"/> too few, mostly irrelevant	almost nothing	no or irrelevant	too few	no	poor	almost no	too few	poor	no	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1	relevant, aimed at resolving unclear points in the report	some main points	few	some	some	reasonable	few	some	some aspects fine	some	1 <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2	+ short, apt and clear, well prioritized, all time used	main points	some	some correct	reasonable	fair	some	some correct	good	reasonable	2 <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
		all relevant points	many	many correct	fair	efficient	good	many correct	some aspects efficient	fair	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

- few questions  
- not all time used

- not all time used  
- few relevant questions

# REVIEWER

Start from 1 and add/subtract

$$1 + 1.8 + 2 + 2 + 1 - 0 - 0 = 8$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0	too few, mostly irrelevant	poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	almost no	too few	-1 irrelevant	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1	relevant, meant to clarify unclear points	partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	0 <input checked="" type="checkbox"/> none	1 <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2	+ suitably allotted to Rep & Opp, most time used	good	mostly adequate	reasonable	informative, apt	mostly adequate	reasonable	relevant parts	many	1 <input checked="" type="checkbox"/> relevant, constructive	2 <input checked="" type="checkbox"/> deeply incorrect or show deep misconceptions
	+ short, apt and clear, well prioritized, time managed efficiently	detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate		

NOTES: + very efficient questions  
+ review with own ideas



# REPORTER

Start from 1 and add/subtract



# SCORESHEET

Fight 3 E, Stage: 2, Problem No. \_\_\_\_\_

sign *Pai*

Poier, Peter

Rep: Germany Rosenheim

Opp: Gymnasium Freistadt

Rev: Slovak YPT

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 — almost no	0 — almost no	0 — too few	0 — no/ almost no	0 — others' data, incorrectly cited	0 — misunderstood	0 — unclear, chaotic	0 — too few	0 — poor	0 — <input checked="" type="checkbox"/> concise and correct or no questions asked 1 — some incorrect, inconclusive or too long 2 — deeply incorrect or show deep misconceptions
1 — some	1 — some	1 — some	1 — some	1 — review of sources, cited	1 — partly	1 — partly clear	1 — some	1 — some aspects fine	
2 — fair	2 — fair	2 — fair	2 — not well fitting	2 — some own input	2 — average	2 — average	2 — many <input checked="" type="checkbox"/>	2 — good <input checked="" type="checkbox"/>	
3 — good	3 — good	3 — well performed, sufficient number	3 — deviations	3 — + some interesting results	3 — some aspects above average	3 — some parts well done	3 — + data/theory convincingly supported	3 — some aspects efficient	
4 — detailed demonstrative	4 — quite detailed, correct <input checked="" type="checkbox"/>	4 — + results explained errors analysed	4 — + theory limits explained, conclusive	4 — considerable experimental or theoretical	4 — interesting solution	4 — overall clear, demonstrative	4 — proved deep understanding	4 — overall efficient	
5 — deep and comprehensible, shows physical insight	5 — detailed, complex, completely testable	5 — + reproducible, convincing analysis	5 — well fitting, deviations analysed, conclusive	5 — considerable experimental and theoretical	5 — greater extent than expected	5 — + complex concepts well communicated			

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 0 + 2 + 2 - 0 = 5$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 — <input checked="" type="checkbox"/> too few, mostly irrelevant	0 —	0 — almost nothing	0 — no or irrelevant	0 — too few	0 — no	0 — poor	0 — almost no	0 — too few	0 — poor	0 — no	0 — <input checked="" type="checkbox"/> concise and correct or no questions asked 1 — some incorrect, inconclusive or too long 2 — deeply incorrect or show deep misconceptions
1 — relevant, aimed at resolving unclear points in the report	1 —	1 — some main points	1 — few	1 — some	1 — some	1 — reasonable	1 — few	1 — some	1 — some aspects fine	1 — some	
2 — + short, apt and clear, well prioritized, all time used	2 —	2 — main points <input checked="" type="checkbox"/>	2 — some <input checked="" type="checkbox"/>	2 — some correct <input checked="" type="checkbox"/>	2 — reasonable	2 — fair <input checked="" type="checkbox"/>	2 — some <input checked="" type="checkbox"/>	2 — some correct <input checked="" type="checkbox"/>	2 — good <input checked="" type="checkbox"/>	2 — reasonable <input checked="" type="checkbox"/>	
	3 —	3 — all relevant points	3 — many	3 — many correct	3 — fair	3 — efficient	3 — good	3 — many correct	3 — some aspects efficient	3 — fair	
	4 —	4 — practically all points	4 — practically all	4 — + improvement suggestions	4 — very good	4 — + all time used	4 — new crucial point(s)	4 — + improvement suggestions	4 — overall efficient	4 — very good	

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 2 + 2 + 1.5 + 1 - 0.5 = 8$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 — too few, mostly irrelevant	0 —	0 — poor/wrong	0 — irrelevant	0 — no	0 — poor/wrong	0 — irrelevant	0 — no	0 — almost no	0 — too few	0 — irrelevant	0 — concise and correct or no questions asked 1 — some incorrect, inconclusive or too long 2 — deeply incorrect or show deep misconceptions
1 — relevant, meant to clarify unclear points	1 —	1 — partial	1 — partially relevant	1 — some	1 — too short/long	1 — partially relevant	1 — some	1 — too short/long	1 — some	1 — none	
2 — + suitably allotted to Rep & Opp, most time used	2 —	2 — good <input checked="" type="checkbox"/>	2 — mostly adequate <input checked="" type="checkbox"/>	2 — reasonable <input checked="" type="checkbox"/>	2 — informative, apt <input checked="" type="checkbox"/>	2 — mostly adequate <input checked="" type="checkbox"/>	2 — reasonable <input checked="" type="checkbox"/>	2 — relevant part <input checked="" type="checkbox"/>	2 — many <input checked="" type="checkbox"/>	2 — relevant, constructive <input checked="" type="checkbox"/>	
3 — + short, apt and clear, well prioritized, time managed efficiently	3 —	3 — detailed, complex	3 — fully adequate	3 — good	3 — condensed & accurate	3 — fully adequate	3 — good	3 — accurate, conclusive	3 — fully adequate		

NOTES:

# REPORTER

Start from 1 and add/subtract

$$1 + 3,75 + 1,75 - 0 = 6,5 \quad 7$$



# SCORESHEET

Fight 3 E, Stage: 2, Problem No. 9

sign

Rep: Germany Rosenheim

Opp: Gymnasium Freistadt

Rev: Slovak YPT

Schweitzer, Susanne

## REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

## DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	+ data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

## ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 / concise and correct or no questions asked
- 1 / some incorrect, inconclusive or too long
- 2 / deeply incorrect or show deep misconceptions

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 0,5 + 2,25 + 2,1 - 0 = 5,85 \quad 6$$

## QUESTIONS ASKED

- 0 / too few, mostly irrelevant
- 1 / relevant, aimed at resolving unclear points in the report
- 2 / + short, apt and clear, well prioritized, all time used

## OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	main points	some	some correct	reasonable	fair
3	all relevant points	many	many correct	fair	efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

## DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	some	some correct	good	reasonable
3	good	many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

## ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 / concise and correct or no questions asked
- 1 / some incorrect, inconclusive or too long
- 2 / deeply incorrect or show deep misconceptions

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 1,5 + 2,5 + 2,25 + 1,5 + 0,5 - 0 = 9,25 \quad 9$$

## QUESTIONS ASKED

- 0 / too few, mostly irrelevant
- 1 / relevant, meant to clarify unclear points
- 2 / + suitably allotted to Rep & Opp, most time used
- 3 / + short, apt and clear, well prioritized, time managed efficiently

## REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	partial	partially relevant	some
2	good	mostly adequate	reasonable
3	detailed, complex	fully adequate	good

## REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	some
2	informative, apt	mostly adequate	reasonable
3	condensed & accurate	fully adequate	good

## DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	almost no	too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

## MISSED POINTS POINTED OUT

- 1 / irrelevant
- 0 / none
- 1 / relevant, constructive

## ANSWERS TO JURY QUESTIONS

- 0 / concise and correct or no questions asked
- 1 / some incorrect, inconclusive or too long
- 2 / deeply incorrect or show deep misconceptions

NOTES:



# REPORTER

Start from 1 and add/subtract

$$1 + 4 + 2 - 0 = 7$$



# SCORESHEET

Fight 3 E, Stage: 2, Problem No. \_\_\_\_\_

sign *Martin Tazreiter*

Tazreiter, Martin

Rep: Germany Rosenheim

Opp: Gymnasium Freistadt

Rev: Slovak YPT

REPORT								DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication		relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic		0 too few	poor	0 ✗ concise and correct or no questions asked 1 some incorrect, inconclusive or too long -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 some	some	some	✓ some	review of sources, cited	partly	partly clear		1 some	some aspects fine	
2 fair	fair	✗ fair	not well fitting	✓ some own input	✗ average	average		2 many	good	
3 good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done		3 + data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	✗ quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	✗ overall clear, demonstrative		4 proved deep understanding	overall efficient	
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated				

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 0.5 + 1.5 + 1.5 - 0 = 5$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant	✗	almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 ✗ concise and correct or no questions asked 1 some incorrect, inconclusive or too long -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 relevant, aimed at resolving unclear points in the report		some main points	few	some	some	reasonable	1 few	some	some aspects fine	some	
2 + short, apt and clear, well prioritized, all time used		✗ main points	✗ some	some correct	reasonable	fair	2 some	some correct	good	reasonable	
		all relevant points	many	many correct	fair	efficient	3 good	many correct	some aspects efficient	fair	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 + 0.5 + 1 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant		poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 ✗ concise and correct or no questions asked 1 some incorrect, inconclusive or too long -1 some incorrect, inconclusive or too long -2 deeply incorrect or show deep misconceptions
1 relevant, meant to clarify unclear points	✗	partial	partially relevant	some	1 too short/long	partially relevant	some	1 too short/long	some	0 none	
2 + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	2 informative, apt	mostly adequate	reasonable	2 relevant parts	many	1 ✗ relevant, constructive	
3 + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate		

NOTES:

# REPORTER

Start from 1 and add/subtract

$$1 + 4 + 2 - 0 = 7$$



# SCORESHEET

Fight 3 E, Stage: 2, Problem No. 9

sign *Alexa Alex*

Weiß, Lisa

Rep: Germany Rosenheim

Opp: Gymnasium Freistadt

Rev: Slovak YPT

REPORT	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	DISCUSSION WITH OPPONENT	ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	relevant arguments/responses	reporter's conduct at the discussion
1	some	some	some	some	review of sources, cited	partly	partly clear	too few	poor
2	fair	fair	fair	not well fitting	some own input	average	average	some	some aspects fine
3	—	—	—	deviations	+ some interesting results	some aspects above average	some parts well done	many	good
4	good	good	well performed, sufficient number	qualitatively analysed	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	+ data/theory convincingly supported	some aspects efficient
5	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated	proved deep understanding	overall efficient
6	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive					
7									

NOTES:

explained experimental problems

# OPPONENT

Start from 1 and add/subtract

$$1 + 0,5 + 2,5 + 1,5 - 0,5 = 5$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS		
0	too few, mostly irrelevant	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	0	concise and correct or no questions asked	
1	relevant, aimed at resolving unclear points in the report	0	almost nothing	no or irrelevant	too few	no	poor	0	almost no	too few	poor	no	
2	+ short, apt and clear, well prioritized, all time used	1	some main points	few	some	some	reasonable	1	few	some	some aspects fine	some	
		2	main points	some	some correct	reasonable	fair	2	some	some correct	good	reasonable	
		3	all relevant points	many	many correct	fair	efficient	3	good	many correct	some aspects efficient	fair	
		4	practically all points	practically all	+ improvement suggestions	very good	+ all time used	4	new crucial point(s)	+ improvement suggestions	overall efficient	very good	
NOTES:												1	some incorrect, inconclusive or too long
												2	deeply incorrect or show deep misconceptions

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 3 + 2,5 + 1,5 - 0,5 = 8$$

QUESTIONS ASKED	REVIEW OF REPORT	REVIEW OF OPPOSITION	DISCUSSION ANALYSIS	MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
0 — too few, mostly irrelevant	report evaluation & understanding	speech evaluation	discussion evaluation	correct own opinions	0 — concise and correct or no questions asked
1 — relevant, meant to clarify unclear points	0 — poor/wrong	0 — poor/wrong	0 — almost no	0 — too few	1 — some incorrect, inconclusive or too long
2 — + suitably allotted to Rep & Opp, most time used	1 — partial	1 — too short/long	1 — too short/long	1 — some	2 — deeply incorrect or show deep misconceptions
3 — + short, apt and clear, well prioritized, time managed efficiently	2 — good	2 — informative, apt	2 — relevant parts	2 — many	
	3 — detailed, complex	3 — condensed & accurate	3 — accurate, conclusive	3 — fully adequate	

NOTES:

Question could have been answered by specific heat capacity of glass + water



## REPORTER

Start from 1 and add/subtract



## SCORESHEET

Fight 3 E, Stage: 3, Problem No. 13

sign

Worm, Paul

Rep: Gymnasium Freistadt

F. H.

Opp: Slovak YPT

M. P.

Rev: Germany Rosenheim

C. Ahrendts

## REPORT

	phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication
0	almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic
1	some	some	some	some	review of sources, cited	partly	partly clear
2	fair	fair	fair	not well fitting	some own input	average	average
3	good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done
4	detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative
5	deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated

## DISCUSSION WITH OPPONENT

	relevant arguments/responses	reporter's conduct at the discussion
0	too few	poor
1	some	some aspects fine
2	many	good
3	+ data/theory convincingly supported	some aspects efficient
4	proved deep understanding	overall efficient

## ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
- 1 — some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES: Task not completely fulfilled → construct device

## OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 3 + 2 - 0 = 7$$

## QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- 1 — relevant, aimed at resolving unclear points in the report
- 2 — + short, apt and clear, well prioritized, all time used

## OPPOSITION (SPEECH)

	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management
0	almost nothing	no or irrelevant	too few	no	poor
1	some main points	few	some	some	reasonable
2	main points	some	some correct	reasonable	fair
3	all relevant points	many	many correct	fair	efficient
4	practically all points	practically all	+ improvement suggestions	very good	+ all time used

## DISCUSSION WITH REPORTER

	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation
0	almost no	too few	poor	no
1	few	some	some aspects fine	some
2	some	some correct	good	reasonable
3	good	many correct	some aspects efficient	fair
4	new crucial point(s)	+ improvement suggestions	overall efficient	very good

## ANSWERS TO JURY and REVIEWER'S QUESTIONS

- 0 — concise and correct or no questions asked
- 1 — some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES:

## REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 1 + 1 + 0 - 0 = 6$$

## QUESTIONS ASKED

- 0 — too few, mostly irrelevant
- 1 — relevant, meant to clarify unclear points
- 2 — + suitably allotted to Rep & Opp, most time used
- 3 — + short, apt and clear, well prioritized, time managed efficiently

## REVIEW OF REPORT

	report evaluation & understanding	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	partial	partially relevant	some
2	good	mostly adequate	reasonable
3	detailed, complex	fully adequate	good

## REVIEW OF OPPOSITION

	speech evaluation	pros & cons	prioritisation
0	poor/wrong	irrelevant	no
1	too short/long	partially relevant	some
2	informative, apt	mostly adequate	reasonable
3	condensed & accurate	fully adequate	good

## DISCUSSION ANALYSIS

	discussion evaluation	correct own opinions
0	almost no	too few
1	too short/long	some
2	relevant parts	many
3	accurate, conclusive	fully adequate

## MISSED POINTS POINTED OUT

- 1 — irrelevant
- 2 — none
- 3 — relevant, constructive

## ANSWERS TO JURY QUESTIONS

- 0 — concise and correct or no questions asked
- 1 — some incorrect, inconclusive or too long
- 2 — deeply incorrect or show deep misconceptions

NOTES:

# REPORTER

Start from 1 and add/subtract

$$1 + 2 + 0 - 1 = 2$$



# SCORESHEET

Fight 3 E, Stage: 3, Problem No. 13

sign K

Klingenböck, Anna Maria

Rep: Gymnasium Freistadt Felix H. Opp: Slovak YPT

Michael P.

Rev: Germany Rosenheim

Charly A.

REPORT								DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication		relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic		0 <input checked="" type="checkbox"/> too few	<input checked="" type="checkbox"/> poor	0 concise and correct or no questions asked
1 some	some	<input checked="" type="checkbox"/> some	<input checked="" type="checkbox"/> some	review of sources, cited	<input checked="" type="checkbox"/> partly	partly clear		1 some	some aspects fine	-1 <input checked="" type="checkbox"/> some incorrect, inconclusive or too long
2 fair	<input checked="" type="checkbox"/> fair	<input checked="" type="checkbox"/> fair	not well fitting	<input checked="" type="checkbox"/> some own input	average	average		2 many	good	-2 deeply incorrect or show deep misconceptions
3 <input checked="" type="checkbox"/> good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	<input checked="" type="checkbox"/> some parts well done		3 + data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative				
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated				

NOTES: - few experiments, missing measurements on fabrics  
- missing measurement device

# OPPONENT

Start from 1 and add/subtract

$$1 + 1.5 + 3.5 + 3 - 0 = 9$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant		almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1 relevant, aimed at resolving unclear points in the report		some main points	few	some	some	reasonable	1 few	some	some aspects fine	some	-1 some incorrect, inconclusive or too long
2 <input checked="" type="checkbox"/> + short, apt and clear, well prioritized, all time used		main points	some	some correct	reasonable	fair	2 some	some correct	good	reasonable	-2 deeply incorrect or show deep misconceptions
		all relevant points	many	many correct	fair	efficient	3 good	many correct	some aspects efficient	<input checked="" type="checkbox"/> fair	
		practically all points	<input checked="" type="checkbox"/> practically all	+ improvement suggestions	<input checked="" type="checkbox"/> very good	<input checked="" type="checkbox"/> + all time used	4 <input checked="" type="checkbox"/> new crucial point(s)	<input checked="" type="checkbox"/> + improvement suggestions	<input checked="" type="checkbox"/> overall efficient	very good	

+ crucial points discussed  
+ good improvement suggestions  
+ proved understanding

# REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 2 + 2 + 1 + 0 - 0 = 7$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant		poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1 <input checked="" type="checkbox"/> relevant, meant to clarify unclear points		partial	partially relevant	some	1 too short/long	partially relevant	some	1 too short/long	some	<input checked="" type="checkbox"/> none	-1 some incorrect, inconclusive or too long
2 <input checked="" type="checkbox"/> + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	2 informative, apt	mostly adequate	reasonable	2 <input checked="" type="checkbox"/> relevant parts	many	1 relevant, constructive	-2 deeply incorrect or show deep misconceptions
3 + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate		

NOTES: + some own ideas presented



# REPORTER

Start from 1 and add/subtract

$$1 + 1.5 + 0.5 - 0 = 3$$



# SCORESHEET

Fight 3 E, Stage: 3, Problem No. \_\_\_\_\_

sign \_\_\_\_\_

*Poier*

Poier, Peter

Rep: Gymnasium Freistadt

Opp: Slovak YPT

Rev: Germany Rosenheim

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	too few	poor	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1 some <input checked="" type="checkbox"/>	some <input checked="" type="checkbox"/>	some	some	review of sources, cited	partly	partly clear	some <input checked="" type="checkbox"/>	some aspects fine	
2 fair	fair	fair	not well fitting	some own input	average	average	many	good	
3 good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	+ data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative			-1 some incorrect, inconclusive or too long
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated	proved deep understanding	overall efficient	-2 deeply incorrect or show deep misconceptions

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 1.5 + 2 + 2 - 0 = 7$$

QUESTIONS ASKED	OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
	understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant	almost nothing	no or irrelevant	too few	no	poor	almost no	too few	poor	no	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1 relevant, aimed at resolving unclear points in the report	some main points	few	some	some	reasonable	few	some	some aspects fine	some	
2 <input checked="" type="checkbox"/> + short, apt and clear, well prioritized, all time used	<input checked="" type="checkbox"/> main points	<input checked="" type="checkbox"/> some many	<input checked="" type="checkbox"/> some correct many correct	<input checked="" type="checkbox"/> reasonable fair	<input checked="" type="checkbox"/> fair efficient	<input checked="" type="checkbox"/> some good	<input checked="" type="checkbox"/> some correct many correct	<input checked="" type="checkbox"/> good some aspects efficient	<input checked="" type="checkbox"/> reasonable fair	
	all relevant points									
	practically all points	practically all	+ improvement suggestions	very good	+ all time used	new crucial point(s)	+ improvement suggestions	overall efficient	very good	-1 some incorrect, inconclusive or too long
										-2 deeply incorrect or show deep misconceptions

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 1.5 + 2 + 2 + 1 + 0.5 - 0 = 8$$

QUESTIONS ASKED	REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
	report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant	poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	almost no	too few	-1 irrelevant	0 <input checked="" type="checkbox"/> concise and correct or no questions asked
1 relevant, meant to clarify unclear points	partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	0 none	
2 <input checked="" type="checkbox"/> + suitably allotted to Rep & Opp, most time used	<input checked="" type="checkbox"/> good	<input checked="" type="checkbox"/> mostly adequate	<input checked="" type="checkbox"/> reasonable	<input checked="" type="checkbox"/> informative, apt	<input checked="" type="checkbox"/> mostly adequate	<input checked="" type="checkbox"/> reasonable	<input checked="" type="checkbox"/> relevant parts	<input checked="" type="checkbox"/> many	<input checked="" type="checkbox"/>	
3 + short, apt and clear, well prioritized, time managed efficiently	detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate	1 relevant, constructive	
										-1 some incorrect, inconclusive or too long
										-2 deeply incorrect or show deep misconceptions

NOTES:

# REPORTER

Start from 1 and add/subtract

$$1 + 2,00 + 2 - 0 = 5,00$$



# SCORESHEET

Fight 3 E, Stage: 3, Problem No. 13

sign

*[Signature]*

Schweitzer, Susanne

Rep: Gymnasium Freistadt

Opp: Slovak YPT

Rev: Germany Rosenheim

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	0 too few	poor	0 / concise and correct or no questions asked
1 some	some	some	some	review of sources, cited	partly	partly clear	1 some	some aspects fine	
2 fair	fair	fair	not well fitting	some own input	average	average	2 many	good	-1 some incorrect, inconclusive or too long
3 <del>good</del>	good	well performed, sufficient number	deviations	+ some interesting results	some aspects above average	some parts well done	3 + data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	4 proved deep understanding	overall efficient	-2 deeply incorrect or show deep misconceptions
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 1,15 + 2,15 + 3 - 0 = 8$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant		0 almost nothing	no or irrelevant	too few	no	poor	0 almost no	too few	poor	no	0 / concise and correct or no questions asked
1 relevant, aimed at resolving unclear points in the report		1 some main points	few	some	some	reasonable	1 few	some	some aspects fine	some	
2 + short, apt and clear, well prioritized, all time used		2 main points	some	some correct	reasonable	fair	2 some	some correct	good	reasonable	-1 some incorrect, inconclusive or too long
		3 all relevant points	many	many correct	fair	efficient	3 good	many correct	some aspects efficient	fair	
		4 practically all points	practically all	+ improvement suggestions	very good	+ all time used	4 new crucial point(s)	+ improvement suggestions	overall efficient	very good	-2 deeply incorrect or show deep misconceptions

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 1,25 + 2,15 + 2,15 + 1,25 + 0 - 0 = 8,5$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant		0 poor/wrong	irrelevant	no	0 poor/wrong	irrelevant	no	0 almost no	too few	-1 irrelevant	0 / concise and correct or no questions asked
1 relevant, meant to clarify unclear points		1 partial	partially relevant	some	1 too short/long	partially relevant	some	1 too short/long	some	0 none	
2 + suitably allotted to Rep & Opp, most time used		2 good	mostly adequate	reasonable	2 informative, apt	mostly adequate	reasonable	2 relevant parts	many	1 relevant, constructive	-1 some incorrect, inconclusive or too long
3 + short, apt and clear, well prioritized, time managed efficiently		3 detailed, complex	fully adequate	good	3 condensed & accurate	fully adequate	good	3 accurate, conclusive	fully adequate	2	

NOTES:



# REPORTER

Start from 1 and add/subtract

$$1 + 3 + 1 - 0 = 5$$



# SCORESHEET

Fight 3 E, Stage: 3, Problem No. \_\_\_\_\_

sign *Marlin Tazreiter*

Tazreiter, Martin

Rep: Gymnasium Freistadt

Opp: Slovak YPT

Rev: Germany Rosenheim

REPORT								DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication		relevant arguments/responses	reporter's conduct at the discussion	
0 --- almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic		too few	poor	0 ✓ concise and correct or no questions asked
1 --- some	some	some	some	review of sources, cited	partly	partly clear		some	some aspects fine	
2 --- fair	fair	fair	not well fitting	some own input	average	average		many	good	
3 --- good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done		+ data/theory convincingly supported	some aspects efficient	
4 --- detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative		proved deep understanding	overall efficient	
5 --- deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated				-1 --- some incorrect, inconclusive or too long
										-2 --- deeply incorrect or show deep misconceptions

NOTES:

# OPPONENT

Start from 1 and add/subtract

$$1 + 1 + 4 + 4 - 0 = 10$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 --- too few, mostly irrelevant		almost nothing	no or irrelevant	too few	no	poor	almost no	too few	poor	no	0 ✗ concise and correct or no questions asked
1 --- relevant, aimed at resolving unclear points in the report	✗	some main points	few	some	some	reasonable	few	some	some aspects fine	some	
2 --- + short, apt and clear, well prioritized, all time used		main points	some	some correct	reasonable	fair	some	some correct	good	reasonable	
		all relevant points	many	many correct	fair	efficient	good	many correct	some aspects efficient	fair	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	new crucial point(s)	+ improvement suggestions	overall efficient	very good	
											-1 --- some incorrect, inconclusive or too long
											-2 --- deeply incorrect or show deep misconceptions

NOTES:

# REVIEWER

Start from 1 and add/subtract

$$1 + 0.5 + 2.5 + 2.5 + 1.5 - 0 = 8$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 --- too few, mostly irrelevant		poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	almost no	too few	-1 --- irrelevant	0 ✗ concise and correct or no questions asked
1 --- relevant, meant to clarify unclear points	✗	partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	0 ✗ none	
2 --- + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	informative, apt	mostly adequate	reasonable	relevant parts	many	1 --- relevant, constructive	
3 --- + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate		
											-1 --- some incorrect, inconclusive or too long
											-2 --- deeply incorrect or show deep misconceptions

NOTES:

# REPORTER

Start from 1 and add/subtract

$$1 + 3 + 1 - 1 = 4$$



# SCORESHEET

Fight 3 E, Stage: 3, Problem No. 13

sign *Wes*

Weiß, Lisa

Rep: Gymnasium Freistadt

Opp: Slovak YPT

Rev: Germany Rosenheim

REPORT							DISCUSSION WITH OPPONENT		ANSWERS TO JURY, OPPONENT, and REVIEWER'S QUESTIONS
phenomenon explanation	theory/model	relevant experiments	comparison between theory and experiment	own contribution	task fulfilment	science communication	relevant arguments/responses	reporter's conduct at the discussion	
0 almost no	almost no	too few	no/ almost no	others' data, incorrectly cited	misunderstood	unclear, chaotic	too few	poor	0 concise and correct or no questions asked
1 some	some	some	some	review of sources, cited	partly	partly clear	some	some aspects fine	1 some incorrect, inconclusive or too long
2 fair	fair	fair	not well fitting	some own input	average	average	many	good	2 deeply incorrect or show deep misconceptions
3 good	good	well performed, sufficient number	deviations qualitatively analysed	+ some interesting results	some aspects above average	some parts well done	+ data/theory convincingly supported	some aspects efficient	
4 detailed demonstrative	quite detailed, correct	+ results explained errors analysed	+ theory limits explained, conclusive	considerable experimental or theoretical	interesting solution	overall clear, demonstrative	proved deep understanding	overall efficient	
5 deep and comprehensible, shows physical insight	detailed, complex, completely testable	+ reproducible, convincing analysis	well fitting, deviations analysed, conclusive	considerable experimental and theoretical	greater extent than expected	+ complex concepts well communicated			

NOTES: • theory very well explained  
• some lack of experiments  
• only partial task fulfilment

# OPPONENT

Start from 1 and add/subtract

$$1 + 2 + 3 + 3 - 0.5 = 9$$

QUESTIONS ASKED		OPPOSITION (SPEECH)					DISCUSSION WITH REPORTER				ANSWERS TO JURY and REVIEWER'S QUESTIONS
		understanding of presentation	relevant topics addressed	own opinions presented	prioritisation	time management	relevant scientific topics	own opinions presented	opponent's conduct of the discussion	prioritisation	
0 too few, mostly irrelevant		almost nothing	no or irrelevant	too few	no	poor	almost no	too few	poor	no	0 concise and correct or no questions asked
1 relevant, aimed at resolving unclear points in the report		some main points	few	some	some	reasonable	few	some	some aspects fine	some	1 some incorrect, inconclusive or too long
2 + short, apt and clear, well prioritized, all time used		main points	some	some correct	reasonable	fair	some	some correct	good	reasonable	2 deeply incorrect or show deep misconceptions
		all relevant points	many	many correct	fair	efficient	good	many correct	some aspects efficient	fair	
		practically all points	practically all	+ improvement suggestions	very good	+ all time used	new crucial point(s)	+ improvement suggestions	overall efficient	very good	

NOTES: very good questions

• very well structured discussion

slightly miss - understood question help by colleague

# REVIEWER

Start from 1 and add/subtract

$$1 + 1 + 1.75 + 1.5 + 1.25 + 0 - 0 = 6$$

QUESTIONS ASKED		REVIEW OF REPORT			REVIEW OF OPPOSITION			DISCUSSION ANALYSIS		MISSED POINTS POINTED OUT	ANSWERS TO JURY QUESTIONS
		report evaluation & understanding	pros & cons	prioritisation	speech evaluation	pros & cons	prioritisation	discussion evaluation	correct own opinions		
0 too few, mostly irrelevant		poor/wrong	irrelevant	no	poor/wrong	irrelevant	no	almost no	too few	-1 irrelevant	0 concise and correct or no questions asked
1 relevant, meant to clarify unclear points		partial	partially relevant	some	too short/long	partially relevant	some	too short/long	some	0 none	1 some incorrect, inconclusive or too long
2 + suitably allotted to Rep & Opp, most time used		good	mostly adequate	reasonable	informative, apt	mostly adequate	reasonable	relevant parts	many	1 relevant, constructive	2 deeply incorrect or show deep misconceptions
3 + short, apt and clear, well prioritized, time managed efficiently		detailed, complex	fully adequate	good	condensed & accurate	fully adequate	good	accurate, conclusive	fully adequate		

NOTES:

• strongly presented her own opinion not always correct