



**Schola Europaea**

Office of the Secretary-General  
**Pedagogical Development Unit**

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**Orig.: FR**

## **Attainment descriptors – Biology – Chemistry – Physics – S4-S5**

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**APPROVED BY THE JOINT TEACHING COMMITTEE AT ITS MEETING OF 13  
AND 14 OCTOBER 2016 IN BRUSSELS**

**Entry into force on 1 September 2018**

## **Attainment descriptors – Biology – Chemistry – Physics – S4-S5**

### **Grade A (9.0-10 – Excellent)**

Displays a comprehensive knowledge of facts and a thorough command and use of concepts and principles in science. Makes connections between different parts of the syllabus and applies concepts to a wide variety of unfamiliar situations and makes appropriate predictions. Is capable of detailed and critical analysis and explanations of complex data. Formulates hypotheses, plans and carries out investigations using a wide range of techniques while being aware of ethical issues. Communicates logically and concisely using appropriate terminology. Demonstrates excellent presentation skills. Shows initiative – a team leader.

### **Grade B (8.0-8.9 – Very good)**

Displays a very broad knowledge of facts and a good command and use of concepts and principles in science. Makes some connections between different parts of the syllabus and applies concepts and principles to unfamiliar situations. Analyses and explains complex data well. Plans and carries out experiments using appropriate techniques, being aware of safety issues. Communicates clearly using scientific vocabulary correctly. Demonstrates very good presentation skills. Works constructively in a team.

### **Grade C (7.0-7.9 – Good)**

Displays a broad knowledge of facts and good understanding of main concepts and principles in science. Is capable of using knowledge in an unfamiliar situation. Produces good analysis and explanations of simple data. Follows a written procedure safely and makes and records observations, presenting them using different techniques. Communicates clearly most of the time using scientific vocabulary correctly. Demonstrates good presentation skills. Works well in a team.

### **Grade D (6.0-6.9 – Satisfactory)**

Displays a reasonable knowledge of facts and definitions, and understanding of basic concepts and principles in science. Is capable of using knowledge in a familiar situation. Produces basic analysis and explanations of simple data. Follows a written procedure safely and records observations. Uses basic scientific vocabulary, and descriptions show some structure. Demonstrates satisfactory presentation skills. Works satisfactorily in a team.

### **Grade E (5.0-5.9 – Sufficient)**

Recalls main names, facts and definitions. Understands only basic concepts and principles in science and can use basic knowledge in a familiar situation. Given a structure can analyze and explain simple data. Follows a written procedure safely and makes basic observations. Uses basic scientific vocabulary, but descriptions may lack structure or clarity. Demonstrates satisfactory presentation skills and participates in team work.

**Grade F (3.0-4.9 – Failed/Weak)**

Displays little recall of factual information and a limited understanding of concepts and principles in science. Can use data only with significant guidance. Has difficulty following instructions without supervision. Generally produces descriptions that are insufficient or incomplete with a poor use of scientific vocabulary. Lacks acceptable presentation skills. Needs assistance when working in a team.

**Grade FX (0-2.9 – Failed/Very weak)**

Displays very little recall of factual information. Shows very little understanding of scientific principles and concepts. Fails to use data adequately. Is not able to safely follow a written procedure. Has very poor communication and presentation skills. Does not work in a team.

## Attainment descriptors – Biology – Chemistry – Physics – S4-S5

	<b>A</b> (9.0-10 – Excellent)	<b>B</b> (8.0-8.9 – Very good)	<b>C</b> (7.0-7.9 – Good)	<b>D</b> (6.0-6.9 – Satisfactory)	<b>E</b> (5.0-5.9 – Sufficient)	<b>F</b> (3.0-4.9 – Failed/Weak)	<b>FX</b> (0-2.9 – Failed/Very weak)
<b>Knowledge</b>	Displays comprehensive knowledge of facts	Displays a very broad knowledge of facts	Displays a broad knowledge of facts	Displays a reasonable knowledge of facts and definitions	Recalls main names, facts and definitions.	Displays little recall of factual information	Displays very little recall of factual information.
<b>Comprehension</b>	and a thorough command and use of concepts and principles in science.	and a good command and use of concepts and principles in science.	and good understanding of main concepts and principles in science.	and understanding of basic concepts and principles in science.	Understands only basic concepts and principles in science.	and a limited understanding of concepts and principles in science.	Shows very little understanding of scientific principles and concepts.
<b>Application</b>	Makes connections between different parts of the syllabus and applies concepts to a wide variety of unfamiliar situations and makes appropriate predictions.	Makes some connections between different parts of the syllabus and applies concepts and principles to unfamiliar situations.	Is capable of using knowledge in an unfamiliar situation.	Is capable of using knowledge in a familiar situation.	and can use basic knowledge in a familiar situation.	/	/
<b>Analysis</b>	Is capable of detailed and critical analysis and explanations of complex data.	Analyses and explains complex data well.	Produces good analysis and explanations of simple data.	Produces basic analysis and explanations of simple data.	Given a structure can analyze and explain simple data.	Can use data only with significant guidance.	Fails to use data adequately.

<b>Experimental work</b>	Formulates hypotheses, plans and carries out investigations using a wide range of techniques while being aware of ethical issues.	Plans and carries out experiments using appropriate techniques, being aware of safety issues.	Follows a written procedure safely and makes and records observations, presenting them using different techniques.	Follows a written procedure safely and records observations.	Follows a written procedure safely and makes basic observations	Has difficulty following instructions without supervision.	Is not able to safely follow a written procedure.
<b>Communication (oral and written)</b>	Communicates logically and concisely using scientific vocabulary correctly. Demonstrates excellent presentation skills.	Communicates clearly using scientific vocabulary correctly. Demonstrates very good presentation skills.	Communicates clearly most of the time using scientific vocabulary correctly. Demonstrates good presentation skills.	Uses basic scientific vocabulary, and descriptions show some structure. Demonstrates satisfactory presentation skills.	Uses basic scientific vocabulary, but descriptions may lack structure or clarity. Demonstrates satisfactory presentation skills	Generally produces descriptions that are insufficient or incomplete with a poor use of scientific vocabulary. Lacks acceptable presentation skills.	Has very poor communication and presentation skills.
<b>Teamwork</b>	Shows initiative – a team leader.	Works constructively in a team.	Works well in a team.	Works satisfactorily in a team.	and participates in team work.	Needs assistance when working in a team.	Does not work in a team.