Beijing BISS International School
北京BISS国际学校

Criterion A: Knowing and understanding

Achievement level	Grade 6 (MYP 1)	Grade 7 (MYP 2)	Grade 8 (MYP 3)	Grade 9 (MYP 4)	Grade 10 (MYP 5)
	Level descriptor				
0	The student does not reach a standard described by any of the descriptors below.				
1-2	The student is able to: i) select appropriate mathematics when solving **simple** problems in **familiar** situations ii) **apply** the selected mathematics successfully when solving **simple familiar** problems iii) generally solve **simple familiar** problems correctly.				
3-4	The student is able to: i) select appropriate mathematics when solving **more complex** problems in **familiar** situations ii) **apply** the selected mathematics successfully when solving **more complex familiar** problems iii) generally solve **more complex familiar** problems correctly.				
5-6	The student is able to: i) select appropriate mathematics when solving **challenging** problems in **familiar** situations ii) **apply** the selected mathematics successfully when solving **challenging familiar** problems iii) generally solve **challenging familiar** problems correctly.				
7-8	The student is able to: i) select appropriate mathematics when solving **challenging** problems in **both familiar and unfamiliar** situations ii) **apply** the selected mathematics successfully when solving **challenging familiar and unfamiliar** problems iii) generally solve **challenging** problems correctly.				

Beijing BISS International School
北京BISS国际学校

Criterion B: Investigating patterns

Achievement level	Grade 6 (MYP 1)	Grade 7 (MYP 2) / Grade 8 (MYP 3)	Grade 9 (MYP 4) / Grade 10 (MYP 5)
	Level descriptor	Level descriptor	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i) **apply, with teacher support,** mathematical problem-solving techniques to recognize **simple** patterns ii) **state** predictions consistent with **simple** patterns.	The student is able to: i) **apply, with teacher support,** mathematical problem-solving techniques to discover **simple** patterns ii) **state** predictions consistent with patterns.	The student is able to: i) **apply, with teacher support,** mathematical problem-solving techniques to discover **simple** patterns ii) **state** predictions consistent with patterns.
3-4	The student is able to: i) **apply** mathematical problem-solving techniques to recognize patterns ii) **suggest** how these patterns work.	The student is able to: i) **apply** mathematical problem-solving techniques to discover **simple** patterns ii) **suggest** relationships and/or general rules consistent with findings.	The student is able to: i) **apply** mathematical problem-solving techniques to discover **simple** patterns ii) **suggest** general rules consistent with findings.
5-6	The student is able to: i) **apply** mathematical problem-solving techniques to recognize patterns ii) **suggest** relationships or general rules **consistent with** findings iii) **verify** whether patterns work for **another example.**	The student is able to: i) **select and apply** mathematical problem-solving techniques to discover **complex** patterns ii) **describe** patterns as relationships and/or general rules **consistent** with findings iii) **verify** these relationships and/or general rules.	The student is able to: i) **select and apply** mathematical problem-solving techniques to discover **complex** patterns ii) **describe** patterns as general rules **consistent** with findings iii) **verify the validity** of these general rules.
7-8	The student is able to: i) **select and apply** mathematical problem-solving techniques to recognize **correct** patterns ii) **describe** patterns as relationships or general rules **consistent with correct** findings iii) **verify** whether patterns work for **other examples.**	The student is able to: i) **select and apply** mathematical problem-solving techniques to discover **complex** patterns ii) **describe** patterns as relationships and/or general rules **consistent with correct** findings iii) **verify and justify** these relationships and/or general rules.	The student is able to: i) **select and apply** mathematical problem-solving techniques to discover **complex** patterns ii) **describe** patterns as general rules **consistent with correct** findings iii) **prove** or **verify, and justify** these general rules.

MATHEMATICS Assessment Criteria

Beijing BISS International School
北京BISS国际学校

Criterion C: Communicating

Achievement level	Grade 6 (MYP 1)	Grade 7 (MYP 2) / Grade 8 (MYP 3)	Grade 9 (MYP 4) / Grade 10 (MYP 5)
	Level descriptor	Level descriptor	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i) use **limited** appropriate mathematical language ii) use **limited** forms of mathematical representation to present information iii) communicate through lines of reasoning that are **difficult to understand.**	The student is able to: i) use **limited** appropriate mathematical language ii) use **limited** forms of mathematical representation to present information iii) communicate through lines of reasoning that are **difficult to understand.**	The student is able to: i) use **limited** mathematical language ii) use **limited** forms of mathematical representation to present information iii) communicate through lines of reasoning that are **difficult to interpret.**
3-4	The student is able to: i) use **some** appropriate mathematical language ii) use **different** forms of mathematical representation to present information **adequately** iii) communicate through lines of reasoning that are **able to be understood**, although these are **not always coherent** iv) **adequately** organize information using a logical structure.	The student is able to: i) use **some** appropriate mathematical language ii) use **different** forms of mathematical representation to present information **adequately** iii) communicate through lines of reasoning that are **able to be understood**, although these are **not always clear** **iv) adequately** organize information using a logical structure.	The student is able to: i) use **some** appropriate mathematical language ii) use **appropriate** forms of mathematical representation to present information **adequately** iii) communicate through lines of reasoning that are **complete** iv) **adequately** organize information using a logical structure.
5-6	The student is able to: i) **usually** use appropriate mathematical language ii) **usually** use **different** forms of mathematical representation to present information **correctly** iii) communicate through lines of reasoning that are **usually coherent** iv) **present work** that is **usually** organized using a logical structure.	The student is able to: i) **usually** use appropriate mathematical language ii) **usually** use **different** forms of mathematical representation to present information **correctly** iii) move between different forms of mathematical representation **with some success** iv) communicate through lines of reasoning that are **clear although not always coherent or complete** v) **present work** that is **usually** organized using a logical structure.	The student is able to: i) **usually** use appropriate mathematical language ii) **usually** use **appropriate** forms of mathematical representation to present information **correctly** iii) **usually** move between different forms of mathematical representation iv) communicate through lines of reasoning that are **complete and coherent** v) **present work** that is **usually** organized using a logical structure.
7-8	The student is able to: i) **consistently** use appropriate mathematical language ii) **consistently** use **different** forms of mathematical representation to present information **correctly** iii) communicate **clearly** through **coherent** lines of reasoning iv) **present work** that is **consistently** organized using a logical structure.	The student is able to: i) **consistently** use appropriate mathematical language ii) use **different** forms of mathematical representation to **consistently** present information **correctly** iii) move **effectively** between different forms of mathematical representation iv) communicate through lines of reasoning that are **complete and coherent** v) **present work** that is **consistently** organized using a logical structure.	The student is able to: i) **consistently** use appropriate mathematical language ii) use **appropriate** forms of mathematical representation to **consistently** present information **correctly** iii) move **effectively** between different forms of mathematical representation iv) communicate through lines of reasoning that are **complete, coherent and concise** v) **present work** that is **consistently** organized using a logical structure.

MATHEMATICS Assessment Criteria

Beijing BISS International School
北京BISS国际学校

Criterion D: Applying mathematics in real-life contexts

Achievement level	Grade 6 (MYP 1)	Grade 7 (MYP 2) / Grade 8 (MYP 3)	Grade 9 (MYP 4) / Grade 10 (MYP 5)
	Level descriptor	Level descriptor	Level descriptor
0	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.	The student does not reach a standard described by any of the descriptors below.
1-2	The student is able to: i) identify **some** of the mathematical elements of the authentic real-life situation ii) apply mathematical strategies to find a solution to the authentic real-life situation, **with limited success.**	The student is able to: i) identify **some** of the mathematical elements of the authentic real-life situation ii) apply mathematical strategies to find a solution to the authentic real-life situation, **with limited success.**	The student is able to: i) identify **some** of the mathematical elements of the authentic real-life situation ii) apply mathematical strategies to find a solution to the authentic real-life situation, **with limited success.**
3-4	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) apply mathematical strategies to reach a solution to the authentic real-life situation iii) **state, but not always correctly,** whether the solution makes sense in the context of the authentic real-life situation.	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) **select, with some success, adequate** mathematical strategies to model the authentic real-life situation iii) apply mathematical strategies to reach a solution to the authentic real-life situation iv) **describe** whether the solution makes sense in the context of the authentic real-life situation.	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) **select, with some success, adequate** mathematical strategies to model the authentic real-life situation iii) apply mathematical strategies to reach a solution to the authentic real-life situation iv) **discuss** whether the solution makes sense in the context of the authentic real-life situation.
5-6	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) **select** adequate mathematical strategies to model the authentic real-life situation iii) apply the selected mathematical strategies to reach a **valid** solution to the authentic real-life situation iv) **describe** the degree of accuracy of the solution v) **state correctly** whether the solution makes sense in the context of the authentic real-life situation.	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) **select** adequate mathematical strategies to model the authentic real-life situation iii) apply the selected mathematical strategies to reach a **valid** solution to the authentic real-life situation iv) **describe** the degree of accuracy of the solution v) **discuss** whether the solution makes sense in the context of the authentic real-life situation.	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) **select** adequate mathematical strategies to model the authentic real-life situation iii) apply the selected mathematical strategies to reach a **valid** solution to the authentic real-life situation iv) **explain** the degree of accuracy of the solution v) **explain** whether the solution makes sense in the context of the authentic real-life situation.
7-8	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) **select** adequate mathematical strategies to model the authentic real-life situation iii) apply the selected mathematical strategies to reach a **correct** solution to the authentic real-life situation iv) **explain** the degree of accuracy of the solution v) **describe correctly** whether the solution makes sense in the context of the authentic real-life situation.	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) **select** adequate mathematical strategies to model the authentic real-life situation iii) apply the selected mathematical strategies to reach a **correct** solution to the authentic real-life situation iv) **explain** the degree of accuracy of the solution v) **explain** whether the solution makes sense in the context of the authentic real-life situation.	The student is able to: i) identify the **relevant** mathematical elements of the authentic real-life situation ii) **select** adequate mathematical strategies to model the authentic real-life situation iii) apply the selected mathematical strategies to reach a **correct** solution to the authentic real-life situation iv) **justify** the degree of accuracy of the solution v) **justify** whether the solution makes sense in the context of the authentic real-life situation.

MATHEMATICS Assessment Criteria