**Math – MYP Y3**

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| **Level** | **Criterion A:**  **Knowing and Understanding** | **Criterion B:**  **Investigating Patterns** | **Criterion C:**  **Communicating** | **Criterion D:**  **Applying Math in Real-Life** |
| **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 | The student does not reach a standard described by any of the descriptors below |
| **1-2** | The student is able to: | The student is able to: | The student is able to: | The student is able to: |
| i. **select** appropriate mathematics when solving simple problems in familiar situations | i. **apply**, with teacher support, mathematical problem-solving techniques to discover simple patterns | i. **use** limited mathematical language | i. **identify** some of the elements of the authentic real-life situation |
| ii. **apply** the selected mathematics successfully when solving these problems | ii. **state** predictions consistent with simple patterns | ii. **use** limited forms of mathematical representation to present information | ii. **apply** mathematical strategies to find a solution to the authentic real-life situation, with limited success |
| iii. generally **solve** these problems correctly | iii. **communicate** through lines of reasoning that are difficult to understand |
| **3-4** | The student is able to: | The student is able to: | The student is able to: | The student is able to: |
| i. **select** appropriate mathematics when solving more complex problems in familiar situations | i. **apply** mathematical problem-solving techniques to discover simple patterns | i. **use** some appropriate mathematical language | i. **identify** the relevant elements of the authentic real-life situation |
| ii. **use** different forms of mathematical representation to present information adequately | ii. **select**, with some success, adequate mathematical strategies to model the authentic real-life situation |
| ii. **apply** the selected mathematics successfully when solving these problems | ii. **suggest** relationships and/or general rules consistent with findings | iii. **communicate** through lines of reasoning that are able to be understood, although these are not always clear | iii. **apply** mathematical strategies to reach a solution to the authentic real-life situation |
| iii. generally **solve** these problems correctly | iv. adequately **organize** information using a logical structure | iv. **describe** whether the solution makes sense in the context of the authentic real-life situation |
| **5-6** | The student is able to: | The student is able to: | The student is able to: | The student is able to: |
| i. **select** appropriate mathematics when solving challenging problems in familiar situations | i. **select** and apply mathematical problem-solving techniques to discover complex patterns | i. usually **use** appropriate mathematical language | i. **identify** the relevant elements of the authentic real-life situation |
| ii. usually **use** different forms of mathematical representation to present information correctly | ii. **select** adequate mathematical strategies to model the authentic real-life situation |
| ii. **apply** the selected mathematics successfully when solving these problems | ii. **describe** patterns as relationships and/or general rules consistent with findings | iii. move between different forms of mathematical representation with some success | iii. **apply** the selected mathematical strategies to reach a valid solution to the authentic real-life situations |
| iii. generally **solve** these problems correctly | iii. **verify** these relationships and/or general rules | iv. **communicate** through lines of reasoning that are clear although not always coherent or complete | iv. **describe** the degree of accuracy of the solution |
| v. **present** work that is usually organized using a logical structure | v. **discuss** whether the solution makes sense in the context of the authentic real-life situation |
| **7-8** | The student is able to: | The student is able to: | The student is able to: | The student is able to: |
| i. **select** appropriate mathematics when solving challenging problems in both familiar and unfamiliar situations | i. **select** and apply mathematical problem-solving techniques to discover complex patterns | i. consistently **use** appropriate mathematical language | i. **identify** the relevant elements of the authentic real-life situation |
| ii.. **use** different forms of mathematical representation to consistently present information correctly | ii. **select** appropriate mathematical strategies to model the authentic real-life situation |
| ii. **apply** the selected mathematics successfully when solving these problems | ii. **describe** patterns as relationships and/or general rules consistent with correct findings | iii. move effectively between different forms of mathematical representation | iii. **apply** the selected mathematical strategies to reach a correct solution |
| iii. generally **solve** these problems correctly | iii. **verify** and **justify** these relationships and/or general rules | iv. **communicate** through lines of reasoning that are complete and coherent | iv. **explain** the degree of accuracy of the solution |
| v. present work that is consistently **organized** using a logical structure | v. **explain** whether the solution makes sense in the context of the authentic real-life situation |