# Mathematics

## Operations and Algebraic Thinking

### 1. Write and interpret numerical expressions (5.OA.A)

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | NOT ASSESSED AT THIS TIME | | | |
| 2 | NOT ASSESSED AT THIS TIME | | | |
| 3 | Unable or rarely able to:<br>• Read, write, interpret, and simplify expressions using numbers and variables to represent a simple situation<br>• Apply order of operations to simplify expressions and equations | Needs prompting and support to:<br>• Read, write, interpret, and simplify expressions using numbers and variables to represent a simple situation<br>• Apply order of operations to simplify expressions and equations | Fluently:<br>• Reads, writes, interprets, and simplifies expressions using numbers and variables to represent a simple situation<br>• Applies order of operations to simplify expressions and equations | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Reads, writes, interprets, and simplifies expressions using numbers and variables to represent a simple situation<br>• Applies order of operations to simplify expressions and equations containing fractions, exponents, and decimals |

## 2. Analyze patterns and relationships (5.OA.B)

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | **NOT ASSESSED AT THIS TIME** | | | |
| 2 | **NOT ASSESSED AT THIS TIME** | | | |
| 3 | Unable or rarely able to:<br>• Generate and extend numerical patterns<br>• Identify relationships between corresponding terms in two patterns.<br>• Graph points in a coordinate plane. | Needs prompting and support to:<br>• Generate and extend numerical patterns<br>• Identify relationships between corresponding terms in two patterns.<br>• Graph points in a coordinate plane. | Fluently:<br>• Generates and extends numerical patterns<br>• Identifies relationships between corresponding terms in two patterns.<br>• Graphs points in a coordinate plane. | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Generates and extends numerical patterns<br>• Identifies relationships between corresponding terms in two patterns.<br>• Graphs points in a coordinate plane and uses them to represent and solve real world problems. |

## Measurement

1. **Converts like measurement units. (5.M.A)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | **NOT ASSESSED AT THIS TIME** | | | |
| 2 | **NOT ASSESSED AT THIS TIME** | | | |
| 3 | Unable or rarely able to:<br>• Convert units within a given system<br>• Apply conversions to real world situations | Needs prompting and support to:<br>• Convert units within a given system<br>• Apply conversions to real world situations | Fluently:<br>• Convert units within a given system<br>• Apply conversions to real world situations | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Convert units within a given system<br>• Apply conversions to real world situations |

**2. Demonstrate understanding of volume and solve problems (5.M.B)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | NOT ASSESSED AT THIS TIME | | | |
| 2 | NOT ASSESSED AT THIS TIME | | | |
| 3 | Unable or rarely able to:<br>• Solve problems involving volume of standard and composite shapes by using models and equations to represent the problem | Needs prompting and support to:<br>• Solve problems involving volume of standard and composite shapes by using models and equations to represent the problem | Fluently:<br>• Solves problems involving volume of standard and composite shapes by using models and equations to represent the problem | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Solves problems involving volume of standard and composite shapes by using models and equations to represent the problem |

**Data Literacy**

**1. Analyze, represent, and understand data visualizations. (5.DL.A-B)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | **NOT ASSESSSED AT THIS TIME** | | | |
| 2 | **NOT ASSESSED AT THIS TIME** | | | |
| 3 | Unable or rarely able to:<br>• Represent measurement data on a line plot with unit fraction intervals (1/2, 1/ 4, 1/8)<br>• Use learned operations on fractions to solve problems involving data presented on line plots | Needs prompting and support to:<br>• Represent measurement data on a line plot with unit fraction intervals (1/2, 1/ 4, 1/8)<br>• Use learned operations on fractions to solve problems involving data presented on line plots | Fluently:<br>• Represents measurement data on a line plot with unit fraction intervals (1/2, 1/ 4, 1/8)<br>• Uses learned operations on fractions to solve problems involving data presented on line plots | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Represents measurement data on a line plot with unit fraction intervals (1/2, 1/ 4, 1/8)<br>• Uses learned operations on fractions to solve problems involving data presented on line plot |

**Numbers and Operations in Base Ten**

1. **Demonstrates understanding of the place value system (5 NBT.A)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | Unable or rarely able to:<br>• understand the relationships between the places in a multi-digit number | Needs prompting and support to:<br>• understand the relationships between the places in a multi-digit number | Fluently:<br>• understands the relationships between the places in a multi-digit number | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• understands the relationships between the places in a multi-digit number |
| 2 | **NOT ASSESSED AT THIS TIME** | | | |
| 3 | **NOT ASSESSED AT THIS TIME** | | | |

2. **Express numbers using the power of 10 (5.NBT.A. 2)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | Unable or rarely able to:<br>• use whole number exponents to denote powers of 10<br>• explain patterns in the number of zeros in the product or quotient when multiplying or dividing by powers of 10 | Needs prompting and support to:<br>• use whole number exponents to denote powers of 10<br>• explain patterns in the number of zeros in the product or quotient when multiplying or dividing by powers of 10 | Fluently:<br>• uses whole number exponents to denote powers of 10<br>• explains patterns in the number of zeros in the product or quotient when multiplying or dividing by powers of 10 | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• uses whole number exponents to denote powers of 10<br>• explains patterns in the number of zeros in the product or quotient when multiplying or dividing by powers of 10 |
| 2 | **NOT ASSESSED AT THIS TIME** | | | |
| 3 | **NOT ASSESSED AT THIS TIME** | | | |

**3. Read, write, compare, and round decimals. 5.NBT.3**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | Unable or rarely able to:<br>• read, write, and compare decimals to the thousandths<br>• use place value understanding to round decimals to tenths and hundredths place | Needs prompting and support to:<br>• read, write, and compare decimals to the thousandth<br>• use place value understanding to round decimals to tenths and hundredths place | Fluently:<br>• reads, writes, and compares decimals to the thousandths<br>• uses place value understanding to round decimals to the thousandths place | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• reads, writes, and compares decimals to the thousandths place and beyond<br>• uses place value understanding to round decimals to the thousandths place and beyond |
| 2 | **NOT ASSESSED AT THIS TIME** | | | |
| 3 | **NOT ASSESSED AT THIS TIME** | | | |

## 4. Add and subtract multi-digit decimals (5.NBT.B)

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | Unable or rarely able to:<br>• Add and subtract whole numbers and decimals to the thousandths using the standard algorithm<br>• Model, use place value concepts, and properties of operations to add or subtract problems with multi-digit whole numbers and decimals to the hundredths | Needs prompting and support to:<br>• Add and subtract whole numbers and decimals to the thousandths using the standard algorithm<br>• Model, use place value concepts, and properties of operations to add or subtract problems with multi-digit whole numbers and decimals to the hundredths | Fluently:<br>• Adds and subtracts whole numbers and decimals to the thousandths using the standard algorithm<br>• Models, uses place value concepts, and properties of operations to add or subtract problems with multi-digit whole numbers and decimals to the hundredths | Student meets all the criteria for “meets standards”, independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Adds and subtracts whole numbers and decimals to the thousandths place and beyond using the standard algorithm<br>• Models, uses place value concepts, and properties of operations to add or subtract problems with multi-digit whole numbers and decimals to the hundredths place and beyond |
| 2 | **NOT ASSESSED AT THIS TIME** | | | |
| 3 | **NOT ASSESSED AT THIS TIME** | | | |

**5. Multiply multi-digit whole numbers (5.NBT.B)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | Unable or rarely able to:<br>- Multiply multi-digit whole numbers using the standard algorithm<br>- Model and use properties of operations to multiply multi-digit whole numbers<br>Multiply multi-digit whole numbers to the thousandths using the standard algorithm | Needs prompting and support to:<br>• Multiply multi-digit whole numbers using the standard algorithm<br>• Model and use properties of operations to multiply multi-digit whole numbers<br>• Multiply multi-digit whole numbers to the thousandths using the standard algorithm | Fluently:<br>• Multiplies multi-digit whole numbers using the standard algorithm<br>• Models and uses properties of operations to multiply multi-digit whole numbers<br>• Multiplies multi-digit whole numbers to the thousandths using the standard algorithm | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Multiplies multi-digit whole numbers using the standard algorithm<br>• Models and uses properties of operations to multiply multi-digit whole numbers<br>• Multiplies multi-digit whole numbers to the thousandths using the standard algorithm |
| **2** | **NOT ASSESSED AT THIS TIME** | | | |
| **3** | **NOT ASSESSED AT THIS TIME** | | | |

**6. Divide multi-digit whole numbers (5.NBT.B)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | **NOT ASSESSED AT THIS TIME** | | | |
| **2** | Unable or rarely able to:<br>• Divide multi-digit whole numbers using the standard algorithm with up to a two-digit divisor and three-digit dividend | Needs prompting and support to:<br>• Divide multi-digit whole numbers using the standard algorithm with up to a two- digit divisor and three digit | Fluently:<br>• Divides multi-digit whole numbers using the standard algorithm with up to a two-digit divisor and three-digit dividend | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Divides multi-digit whole numbers using the standard algorithm with up to a two- digit divisor and three digit dividend |
| **3** | **NOT ASSESSED AT THIS TIME** | | | |

**7. Multiply multi-digit decimals (5.NBT.B)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | Unable or rarely able to:<br>• Model the multiplication of decimals to the hundredths<br>• Multiply multi-digit whole numbers and decimals to the thousandths using the standard algorithm | Needs prompting and support to:<br>• Model the multiplication of decimals to the hundredths<br>• Multiply multi-digit whole numbers and decimals to the thousandths using the standard algorithm | Fluently:<br>• Models the multiplication of decimals to the hundredths<br>• Multiply multi-digit whole numbers and decimals to the thousandths using the standard algorithm | Student meets all the criteria for “meets standards”, independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Models the multiplication of decimals to the hundredths<br>• Multiply multi-digit whole numbers and decimals to the thousandths using the standard algorithm |
| 2 | **NOT ASSESSED AT THIS TIME** | | | |
| 3 | **NOT ASSESSED AT THIS TIME** | | | |

**8. Divide multi-digit decimals (5.NBT.B)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | **NOT ASSESSED AT THIS TIME** | | | |
| **2** | Unable or rarely able to:<br>• Divide multi-digit whole numbers using the standard algorithm with up to a two-digit divisor and three-digit dividend.<br>• Divide decimals using the standard algorithm where a decimal appears in the divisor and dividend | Needs prompting and support to:<br>• Divide multi-digit whole numbers using the standard algorithm with up to a two-digit divisor and three-digit dividend<br>• Divide decimals using the standard algorithm where a decimal appears in the divisor and dividend | Fluently:<br>• Divides multi-digit whole numbers using the standard algorithm with up to a two-digit divisor and three-digit dividend<br>• Divides decimals using the standard algorithm where a decimal appears in the divisor and dividend | Student meets all the criteria for “meets standards”, independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Divides multi-digit whole numbers using the standard algorithm with up to a two-digit dividend and three-digit dividend<br>• Divides decimals using the standard algorithm where a decimal appears in the divisor and dividend, and can explain its relationship to multiplication |
| **3** | **NOT ASSESSED AT THIS TIME** | | | |

**Number and Operations – Fractions**

**1. Adds and subtracts fractions and mixed numbers to solve word problems. (5.NF.A)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | **NOT ASSESSED AT THIS TIME** | | | |
| **2** | Unable or rarely able to:<br>• Form equivalent fractions and simplify fractions using visual models, number lines, or divisibility rules<br>• Add and subtract fractions and mixed numbers with unlike denominators using the standard algorithm | Needs prompting and support to:<br>• Form equivalent fractions and simplify fractions using visual models, number lines, or divisibility rules<br>• Add and subtract fractions and mixed numbers with unlike denominators using the standard algorithm | Fluently:<br>• Forms equivalent fractions and simplifies fractions using visual models, number lines, or divisibility rules<br>• Adds and subtracts fractions and mixed numbers with unlike denominators using the standard algorithm | Student meets all the criteria for “meets standards”, independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Forms equivalent fractions and simplifies fractions using visual models, number lines, or divisibility rules<br>• Adds and subtracts fractions and mixed numbers with unlike denominators using the standard algorithm and is able to construct viable arguments to explain answers and critique the reasoning of others |
| **3** | **NOT ASSESSED AT THIS TIME** | | | |

## 2. Multiply fractions and mixed numbers (5.NF.B)

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | NOT ASSESSED AT THIS TIME | | | |
| 2 | Unable or rarely able to:<br>• Multiply fractions and whole numbers by a fraction using the standard algorithm or a model<br>• Predict the size of a product when multiplying based on the size of the factors<br>• Solve problems involving multiplication of fractions and mixed numbers by using equations and visual models | Needs prompting and support to:<br>• Multiply fractions and whole numbers by a fraction using the standard algorithm or a model<br>• Predict the size of a product when multiplying based on the size of the factors<br>• Solve problems involving multiplication of fractions and mixed numbers by using equations and visual models | Fluently:<br>• Multiplies fractions and whole numbers by a fraction using the standard algorithm or a model<br>• Predicts the size of a product when multiplying based on the size of the factors<br>• Solves problems involving multiplication of fractions and mixed numbers by using equations and visual models | Student meets all the criteria for “meets standards”, independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Multiplies fractions and whole numbers by a fraction using the standard algorithm or a model<br>• Predicts the size of a product when multiplying based on the size of the factors<br>• Solves problems involving multiplication of fractions and mixed numbers by using equations and visual models |
| 3 | NOT ASSESSED AT THIS TIME | | | |

**3. Divide fractions and whole numbers (5.NF.B)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | NOT ASSESSED AT THIS TIME | | | |
| **2** | Unable or rarely able to:<br>• Compute quotients of fractions by using equations or models | Needs prompting and support to:<br>• Compute quotients of fractions by using equations or models | Fluently:<br>• Compute quotients of fractions by using equations or models | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Compute quotients of fractions by using equations or models |
| **3** | NOT ASSESSED AT THIS TIME | | | |

**Geometry**

1. **Graphs points on a coordinate plane to solve real-world and mathematical problems (5.G.A)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | **NOT ASSESSED AT THIS TIME** | | | |
| **2** | **NOT ASSESSED AT THIS TIME** | | | |
| **3** | Unable or rarely able to:<br>• Locate and plot points in the first quadrant of the coordinate plane<br>• Find the length and vertical segments in the first quadrant<br>• Solve problems involving data represented graphs and tables of ordered pairs | Needs prompting and support to:<br>• Locate and plot points in the first quadrant of the coordinate plane<br>• Find the length and vertical segments in the first quadrant<br>• Solve problems involving data represented graphs and tables of ordered pairs | Fluently:<br>• Locates and plots points in the first quadrant of the coordinate plane<br>• Finds the length and vertical segments in the first quadrant<br>• Solves problems involving data represented graphs and tables of ordered pairs | Student meets all the criteria for "meets standards", independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Locates and plots points in the first quadrant of the coordinate plane and other quadrants<br>• Finds the length and vertical segments in the first quadrant<br>• Solves problems involving data represented graphs and tables of ordered pairs |

**2. Classify two-dimensional figures based on their properties (5.G.B)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| **1** | **NOT ASSESSED AT THIS TIME** | | | |
| **2** | **NOT ASSESSED AT THIS TIME** | | | |
| **3** | Unable or rarely able to:<br>• Describe the attributes of two-dimensional figures using proper mathematical vocabulary<br>• Classify and sort two-dimensional figures in a hierarchy by their attributes | Needs prompting and support to:<br>• Describe the attributes of two-dimensional figures using proper mathematical vocabulary<br>• Classify and sort two-dimensional figures in a hierarchy by their attributes | Fluently:<br>• Describes the attributes of two-dimensional figures using proper mathematical vocabulary<br>• Classifies and sorts two-dimensional figures in a hierarchy by their attributes | Student meets all the criteria for “meets standards”, independently challenges him/herself, and makes insightful connections to other ideas and concepts while he/she:<br>• Describes the attributes of two-dimensional figures using proper mathematical vocabulary<br>• Classifies and sorts two-dimensional figures in a hierarchy by their attributes |

## Mathematical Practices

### 1. Makes sense of problems and perseveres in solving them; reasons abstractly and quantitatively

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| All | When given a problem, student is unable to:<br>• Make a plan to solve it<br>• apply strategies to solve the problem<br>• determine if it makes sense<br>• check the work<br>• select effective strategy<br>• identify appropriate operations<br>• mathematically compute the correct answer | When given a problem, student, with prompting and support, is sometimes able to:<br>• make a plan to solve it<br>• apply strategies to solve the problem<br>• determine if it makes sense<br>• check the work<br>• persevere to solve the problem accurately<br>• select effective strategy<br>• identify appropriate operations<br>• mathematically compute the correct answer | When given a problem, student is consistently able to:<br>• make a plan to solve it<br>• apply strategies to solve the problem<br>• determine if it makes sense<br>• check the work<br>• persevere to solve the problem accurately<br>• select effective strategy<br>• identify appropriate operations<br>• mathematically compute the correct answer | When given a problem, student is consistently and independently able to:<br>• make a plan to solve it<br>• apply strategies to solve the problem<br>• determine if it makes sense<br>• check the work<br>• persevere to solve the problem accurately<br>• suggest at least one other way to solve the problem<br>• interprets the task and applies appropriate operations<br>• computes accurately on more complex problems<br>• makes connections to other<br>• mathematical ideas or contexts |

**2. Constructs viable mathematical arguments/model with mathematics**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| All | Student is unable or rarely able to:<br>• communicate mathematical thinking with accurate vocabulary<br>• communicate logical arguments that follow a clear and coherent path throughout the problem<br>• use representations that are effective<br>• use appropriate representations that are complete | Student sometimes but not consistently:<br>• communicates all mathematical thinking with accurate vocabulary<br>• communicates logical arguments that follow a clear and coherent path throughout the problem<br>• use representations that are effective<br>• use appropriate representations that are complete | Student consistently:<br>• communicates all mathematical thinking with accurate vocabulary<br>• communicates logical arguments that follow a clear and coherent path throughout the problem<br>• uses representations that are effective<br>• uses appropriate representations that are complete | Student consistently:<br>• communicates all mathematical thinking precisely and with accurate vocabulary<br>• communicates logical arguments clearly in oral, written, and/or graphic form to show why a result makes sense<br>• uses representations that are both elegant and insightful<br>• uses appropriate representations on more complex problems |

# Science

## Trimester One

| Topics | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
| --- | --- | --- | --- | --- |
| Matter and Its Interactions<br><br>Motion and Stability: Forces and Interactions | • Student has not demonstrated an adequate understanding of the content and is still developing the required skills.<br>• Student has not demonstrated an adequate ability to compose open-ended responses.<br>• Student has not demonstrated an adequate ability to support understanding through modeling (using measuring and/or graphing) and/or investigation | • Student has demonstrated understanding of the content and can practice the skills with prompting or assistance.<br>• Student has demonstrated understanding of open-ended responses, which may lack necessary detail. May need prompting and support.<br>• Student needs prompting and support to demonstrate an adequate understanding through modeling (using measuring and/or graphing) and/or investigation | • Student has demonstrated understanding of the content and can practice the skills independently.<br>• Student has demonstrated the ability to compose detailed and proficient open-ended responses.<br>• Student is able to thoroughly and accurately demonstrate understanding through modeling and/or investigation | • Student has clearly demonstrated understanding of the content, independently demonstrated the skills being taught, and has made connections to the content in unexpected or non-routine ways.<br>• Student has clearly demonstrated the ability to compose insightful and detailed open-ended responses.<br>• Student's ideas for modeling and investigating are insightful, engaging, and advanced. |

## Trimester Two

| Topics | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| From Molecules to Organisms<br><br>Eco-system: Interactions, Energy, and Dynamics | • Student has not demonstrated an adequate understanding of the content and is still developing the required skills.<br>• Student has not demonstrated an adequate ability to compose open-ended responses.<br>• Student has not demonstrated an adequate ability to support understanding through modeling (using measuring and/or graphing) and/or investigation | • Student has demonstrated understanding of the content and can practice the skills with prompting or assistance.<br>• Student has demonstrated understanding of open-ended responses, which may lack necessary detail. May need prompting and support.<br>• Student needs prompting and support to demonstrate an adequate understanding through modeling (using measuring and/or graphing) and/or investigation | • Student has demonstrated understanding of the content and can practice the skills independently.<br>• Student has demonstrated the ability to compose detailed and proficient open-ended responses.<br>• Student is able to thoroughly and accurately demonstrate understanding through modeling and/or investigation | • Student has clearly demonstrated understanding of the content, independently demonstrated the skills being taught, and has made connections to the content in unexpected or non-routine ways.<br>• Student has clearly demonstrated the ability to compose insightful and detailed open-ended responses.<br>• Student's ideas for modeling and investigating are insightful, engaging, and advanced. |

## Trimester Three

| Topics | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| Earth's Place in the Universe<br><br>Earth's Systems<br><br>Earth and Human Activity | • Student has not demonstrated an adequate understanding of the content and is still developing the required skills.<br>• Student has not demonstrated an adequate ability to compose open-ended responses.<br>• Student has not demonstrated an adequate ability to support understanding through modeling (using measuring and/or graphing) and/or investigation | • Student has demonstrated understanding of the content and can practice the skills with prompting or assistance.<br>• Student has demonstrated understanding of open-ended responses, which may lack necessary detail. May need prompting and support.<br>• Student needs prompting and support to demonstrate an adequate understanding through modeling (using measuring and/or graphing) and/or investigation | • Student has demonstrated understanding of the content and can practice the skills independently.<br>• Student has demonstrated the ability to compose detailed and proficient open-ended responses.<br>• Student is able to thoroughly and accurately demonstrate understanding through modeling and/or investigation | • Student has clearly demonstrated understanding of the content, independently demonstrated the skills being taught, and has made connections to the content in unexpected or non-routine ways.<br>• Student has clearly demonstrated the ability to compose insightful and detailed open-ended responses.<br>• Student's ideas for modeling and investigating are insightful, engaging, and advanced. |

## Science Inquiry and Engineering - All Semesters

| Needs Support | Approaching Standard | Meets Standard | Exceeds Standard |
|---|---|---|---|
| Student is unable, even with prompting to:<br>• Utilize scientific inquiry by engaging in activities that lead to an understanding of scientific concepts.<br>• Construct arguments which support scientific concepts based on evidence<br>• Apply scientific concepts to real world scenarios<br>• Contribute to class discussions and activities. | With prompting and support student is able to:<br>• Utilize scientific inquiry by engaging in activities that lead to an understanding of scientific concepts.<br>• Construct arguments which support scientific concepts based on evidence<br>• Apply scientific concepts to real world scenarios<br>• Contribute to class discussions and activities. | Student is able to consistently:<br>• Utilize scientific inquiry by engaging in activities that lead to an understanding of scientific concepts.<br>• Construct arguments which support scientific concepts based on evidence<br>• Apply scientific concepts to real world scenarios<br>• Contribute to class discussions and activities. | Student meets all criteria for "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br>☐ Utilizing scientific inquiry by engaging in activities that lead to an understanding of scientific concepts.<br>☐ Constructing arguments which support scientific concepts based on evidence<br>☐ Applying scientific concepts to real world scenarios<br>☐ Contributing to class discussions and activities. |