In March 2020, school districts across the state experienced school closure due to COVID-19. Although schools were closed, districts transitioned to online instruction. The design and content of the at-home instruction model for districts varied across the state. Some taught review units of instruction, while others continued to teach the next units of instruction within their scope and sequence. Although some districts continued to teach the next units of instruction, the depth of concept expectations within the units may not have been met by all students. In order to support foundational understandings of concepts within the last nine weeks of 2019-2020, the mathematics team of TEKS Resource System has designed the Mathematics COVID-19 Gap Implementation Tool for district considerations during the 2020-2021 school year.

For non-STAAR tested grade levels, some units in the last nine weeks may have included concepts that had not been introduced earlier in the school year. For STAAR-tested grade levels, most school districts were completing the teaching of all standards in preparation of the upcoming STAAR. TEKS Resource System was diligent when creating each grade level scope and sequence to ensure the 4th nine weeks units were designed to solidify foundational understandings for students to be prepared for the next grade level. Therefore, the TEKS Resource System Mathematics COVID-19 Gap Implementation Tool reminds teachers to consider all previous grade level(s) standards of the last nine weeks that are aligned to the current grade level standards of the 2020-2021 school year.   
Note: Since these tools highlight the standards of the previous grade level(s), there is not a Kindergarten Mathematics COVID-19 Gap Implementation Tool.

Our goal is to encourage the inclusion of previous foundational understandings when appropriate throughout the year rather than beginning the 2020-2021 school year reviewing the last nine weeks of the previous year. We are not asking teachers to teach an additional nine weeks of school, but to use instructional techniques such as pre-assessing and wrapping of standards to connect vertically aligned grade level understandings seamlessly. Or, districts may choose to spiral previous foundational understandings prior to the current grade level unit of instruction.

**Gap Considerations at a Glance**

|  |  |  |
| --- | --- | --- |
| **Previous Grade Level → Current Grade Level** | **Previous Grade Level Concepts**  **NOT Taught or NOT COMPLETELY Taught**  **Prior to Last Nine Weeks of 2019-2020**  **That Impact the Current Grade Level** | **Previous Grade Level Concepts**  **Being Reviewed or Extended**  **in the Last Nine Weeks of 2019-2020**  **That May Impact the Current Grade Level** |
| Grade 7 → Grade 8 |  | Proportionality; Algebraic representations, relationships, and problem solving; Geometric representations, relationships, and problem solving |

**Quick Key to Reading the Mathematics COVID-19 Gap Implementation Tool**

|  |  |
| --- | --- |
| **Strikethrough(s)** | Strikethrough(s) in the previous grade level **Last 9 Weeks Standards** column reflect the strikethrough(s) that appear in the previous grade level Unit IFDduring the last 9 weeks. This strikethrough(s) indicates the part of the SE that was not included in the hyperlinked previous grade level unit.  Strikethrough(s) in the current grade level **Aligned Standards** column reflect the strikethrough(s) that appear in the current grade level Unit IFD. This strikethrough(s) indicates the part of the SE that is not included in the current grade level unit where the gap is being considered.  While the standards in each row of the table are vertically aligned, any strikethroughs are not necessarily vertically aligned. |
| **Underlines** | **No underline** indicates the standard was completely taught prior to the 4th nine weeks.  **Underline** indicates the standard or part of the standard was not taught prior to the 4th nine weeks. |
| **Xs** | An X in a column **with** a previous grade level hyperlink indicates the current grade level unit in which all of the current grade level standards in the row occur and where the gap considerations from the previous grade level impact the current unit.  An X in a column **without** a previous grade level hyperlink indicates where all or some of the current grade level standards in the row occur in the scope and sequence. |
| **Hyperlinks** | A hyperlink to the previous grade level Unit IFD along with the previous grade level standards allows for quick access to view the specificity of the previous grade level standard(s) that includes a potential gap. |
| **Alternating Shading** | Alternating white and gray shading allows for easy visualization of a change in unit number. |

For complete instruction on how to read this tool, see the [Mathematics COVID-19 Gap Implementation Tool Instructions](https://www.teksresourcesystem.net/module/portfolio/filehandler.ashx?ID=934322).

|  |  | **2020–2021 School Year Grade 8 Units Reflected on Year at a Glance (YAG)** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade 7**  **Last 9 Weeks Standards  2019-2020** | **Grade 8 Aligned Standards**  **2020-2021** | **Unit**  **01** | **Unit**  **02** | **Unit**  **03** | **Unit**  **04** | **Unit**  **05** | **Unit**  **06** | **Unit**  **07** | **Unit**  **08** | **Unit**  **09** | **Unit**  **10** | **Unit**  **11** | **Unit**  **12** |
| There are no additional COVID-19 gap considerations from the previous grade level for this unit. | | **X** |  |  |  |  |  |  |  |  |  |  |  |
| **District notes:** | | | | | | | | | | | | | |
| There are no additional COVID-19 gap considerations from the previous grade level for this unit. | |  | **X** |  |  |  |  |  |  |  |  |  |  |
| **District notes:** | | | | | | | | | | | | | |
| **7.10A** Write one-variable, two-step equations and inequalities to represent constraints or conditions within problems.  *Supporting Standard* | **8.8A** Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants.  *Supporting Standard* |  |  | **X**  [**G7U11**](https://www.teksresourcesystem.net/module/content/search/item/678269/viewdetail.ashx)  **7.10A** |  |  |  |  |  |  |  |  |  |
| **Considerations:**  Although students may have been taught 7.10A, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.8A. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of writing one-variable, two-step equations and inequalities with the variable on one side of the equation or inequality prior to writing one-variable, two-step equations and inequalities with variables on both sides of the equation or inequality. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.10C** Write a corresponding real-world problem given a one-variable, two-step equation or inequality.  *Supporting Standard* | **8.8B** Write a corresponding real-world problem when  given a one-variable equation or inequality with variables on both sides of the equal sign using rational number coefficients and constants.  *Supporting Standard* |  |  | **X**  [**G7U11**](https://www.teksresourcesystem.net/module/content/search/item/678269/viewdetail.ashx)  **7.10C** |  |  |  |  |  |  |  |  |  |
| **Considerations:**  Although students may have been taught 7.10C, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.8B. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of writing a corresponding real-world problem given a one-variable, two-step equation or inequality with the variable on one side of the equation or inequality prior to writing a corresponding real-world problem given a one-variable, two-step equation or inequality with variables on both sides of the equation or inequality. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.11A** Model and solve one-variable, two-step equations and inequalities.  *Readiness Standard* | **8.8C** Model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants  *Readiness Standard* |  |  | **X**  [**G7U11**](https://www.teksresourcesystem.net/module/content/search/item/678269/viewdetail.ashx)  **7.11A** |  |  |  |  |  |  | **X** |  |  |
| **Considerations:**  Although students may have been taught 7.11A, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.8C. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of modeling and solving one-variable, two-step equations with the variable on one side of the equation prior to modeling and solving one-variable, two-step equations with variables on both sides of the equation.   Note: Grade 7 requires solving one-variable, two-step inequalities with the variable on one side of the inequality using concrete, pictorial, and algebraic representations, but solving one-variable, two-step inequalities with variables on both sides of the inequality does not occur until Algebra I. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.4B** Calculate unit rates from rates in mathematical and real-world problems.  *Supporting Standard* | **8.4A** Use similar right triangles to develop an understanding that slope, *m*, given as the rate comparing the change in  *y*-values to the change in *x*-values, (*y*2 - *y*1)/ (*x*2 - *x*1), is the same for any two points (*x*1, *y*1) and (*x*2, *y*2) on the same line.  *Supporting Standard*  **8.4C** Use data from a table or graph to determine the rate of change or slope and *y*-intercept in mathematical and real-world problems.  *Readiness Standard* |  |  |  | **X**  [**G7U10**](https://www.teksresourcesystem.net/module/content/search/item/678270/viewdetail.ashx)  **7.4B** |  |  |  |  |  | **X** |  |  |
| **Considerations:**  Although students may have been taught 7.4B, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.4A and 8.4C. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of unit rates prior to introducing similar right triangles to develop an understanding of equivalent representations of slope, *m*. * Pre-assess students’ understanding of unit rates prior to introducing the determination of the rate of change or slope and *y*-intercept from a table or graph. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.4A** Represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including *d* = *rt*.  *Readiness Standard* | **8.4B** Graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship.  *Readiness Standard* |  |  |  |  | **X**  [**G7U10**](https://www.teksresourcesystem.net/module/content/search/item/678270/viewdetail.ashx)  **7.4A** | **X** |  |  |  | **X** |  | **X** |
| **Considerations:**  Although students may have been taught 7.4A, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.4B. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of constant rates of change graphically prior to introducing the graphical representation of unit rate as the slope of the line that models the relationship. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.4A** Represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including *d* = *rt*.  *Readiness Standard*  **7.4C** Determine the constant of proportionality (*k* = *y/x*) within mathematical and real-world problems.  *Supporting Standard* | **8.5A** Represent linear proportional situations with tables, graphs, and equations in the form of *y* = *kx*.  *Supporting Standard* |  |  |  |  | **X**  [**G7U10**](https://www.teksresourcesystem.net/module/content/search/item/678270/viewdetail.ashx)  **7.4A**  **7.4C** | **X** |  |  |  |  |  | **X** |
| **Considerations:**  Although students may have been taught 7.4A and 7.4C, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.5A. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of representing constant rates of change and determining the constant of proportionality, , prior to introducing the representation of linear proportional situations involving a constant of proportionality, *y* = *kx*. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.7A** Represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form *y* = *mx* + *b*.  *Readiness Standard* | **8.5B** Represent linear non-proportional situations with tables, graphs, and equations in the form of *y* = *mx* + *b*, where  *b* ≠ 0.  *Supporting Standard*  **8.5F** Distinguish between proportional and non-proportional situations using tables, graphs, and equations in the form *y* = *kx* or *y* = *mx* + *b*, where *b* ≠ 0.  *Supporting Standard* |  |  |  |  | **X**  [**G7U10**](https://www.teksresourcesystem.net/module/content/search/item/678270/viewdetail.ashx)  **7.7A** | **X** |  |  |  |  |  | **X** |
| **Considerations:**  Although students may have been taught 7.7A, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.5B and 8.5F. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of linear relationships in the form of *y* = *mx* + *b* prior to introducing the formal language of linear non-proportional situations in the form of *y* = *mx* + *b*, where *b* ≠ 0*.* * Pre-assess students’ understanding of linear relationships in the form of *y* = *mx* + *b* prior to introducing how to distinguish between linear proportional situations in the form of *y* = *kx* or *y* = *mx* + *b*, where *b* = 0, and linear non-proportional situations in the form of *y* = *mx* + *b*, where *b* ≠ 0. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.4C** Determine the constant of proportionality (*k* = *y/x*) within mathematical and real-world problems.  *Supporting Standard* | **8.5E** Solve problems involving direct variation.  *Supporting Standard* |  |  |  |  | **X**  [**G7U10**](https://www.teksresourcesystem.net/module/content/search/item/678270/viewdetail.ashx)  **7.4C** |  |  |  |  |  |  |  |
| **Considerations:**  Although students may have been taught 7.4C, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.5E. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of determining the constant of proportionality, , prior to introducing problems involving direct variation, *y* = *kx*. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.11B** Determine if the given value(s) make(s) one-variable, two-step equations and inequalities true.  *Supporting Standard* | **8.9A** Identify and verify the values of *x* and *y* that simultaneously satisfy two linear equations in the form *y* = *mx* + *b* from the intersections of the graphed equations.  *Supporting Standard* |  |  |  |  | **X**  [**G7U11**](https://www.teksresourcesystem.net/module/content/search/item/678269/viewdetail.ashx)  **7.11B** |  |  |  |  |  |  | **X** |
| **Considerations:**  Although students may have been taught 7.11B, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.9A. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of when a given value satisfies a one-variable, two-step equation or a set of values satisfy a one-variable, two-step inequality prior to introducing the identification and verification of the values of *x* and *y*, a single point, that simultaneously satisfy two graphed linear equations. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.7A** Represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form *y* = *mx* + *b*.  *Readiness Standard* | **8.5I** Write an equation in the form *y* = *mx* + *b* to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations.  *Readiness Standard* |  |  |  |  |  | **X**  [**G7U10**](https://www.teksresourcesystem.net/module/content/search/item/678270/viewdetail.ashx)  **7.7A** |  |  |  | **X** |  | **X** |
| **Considerations:**  Although students may have been taught 7.7A, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.5I. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of linear relationships in the form of *y* = *mx* + *b* prior to writing equations in the form of *y* = *mx* + *b* to model linear relationships. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.5C** Solve mathematical and real-world problems involving similar shape and scale drawings.  *Readiness Standard* | **8.10D** Model the effect on linear and area measurements of dilated two-dimensional shapes.  *Supporting Standard* |  |  |  |  |  |  | **X**  [**G7U10**](https://www.teksresourcesystem.net/module/content/search/item/678270/viewdetail.ashx)  **7.5C** |  |  |  |  |  |
| **Considerations:**  Although students may have been taught 7.5C, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.10D. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of scale factors in similar shapes and scale drawings prior to introducing the effect of scale factors on linear and area measurements of dilated two-dimensional shapes. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.11C** Write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships.  *Supporting Standard* | **8.8D** Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.  *Supporting Standard* |  |  |  |  |  |  |  | **X**  [**G7U12**](https://www.teksresourcesystem.net/module/content/search/item/678268/viewdetail.ashx)  **7.11C** |  |  |  |  |
| **Considerations:**  Although students may have been taught 7.11C, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.8D. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of the sum of the angles in a triangle and angle relationships prior to introducing the relationships of angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| **7.9A** Solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids.  *Readiness Standard*  **7.9B** Determine the circumference and area of circles.  *Readiness Standard* | **8.7A** Solve problems involving the volume of cylinders, cones, and spheres.  *Readiness Standard* |  |  |  |  |  |  |  |  | **X**  [**G7U12**](https://www.teksresourcesystem.net/module/content/search/item/678268/viewdetail.ashx)  **7.9A**  **7.9B** |  |  |  |
| **Considerations:**  Although students may have been taught 7.9A and 7.9B, they may not have had the opportunity to solidify the foundational understandings to prepare them for 8.7A. Grade 8 teachers should be prepared to:   * Pre-assess students’ understanding of how to determine volume, the area of a circle, and the radius of a circle prior to introducing how to solve problems involving the volume of cylinders, cones, and spheres. | | | | | | | | | | | | | |
| **District notes:** | | | | | | | | | | | | | |
| There are no additional COVID-19 gap considerations from the previous grade level for this unit. | |  |  |  |  |  |  |  |  |  | **X** |  |  |
| **District notes:** | | | | | | | | | | | | | |
| There are no additional COVID-19 gap considerations from the previous grade level for this unit. | |  |  |  |  |  |  |  |  |  |  | **X** |  |
| **District notes:** | | | | | | | | | | | | | |
| There are no additional COVID-19 gap considerations from the previous grade level for this unit. | |  |  |  |  |  |  |  |  |  |  |  | **X** |
| **District notes:** | | | | | | | | | | | | | |