# Whiteriver Unified School District Essential Standards Quarterly Focus

| What we expect the students to learn: | |
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| **Grade: 3rd** | **Subject: Math** |

**1st Quarter:**

**3.NBT.A:** Use place value understanding and properties of operations to perform multi-digit arithmetic.

- **3.NBT.A.1 -** Use place value understanding to round whole numbers to the nearest 10 or 100.
- **3.NBT.A.2 -** Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

**Reveal Unit: 1-2**

**3.OA.D.8:** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Utilize understanding of the Order of Operations when there are no parentheses.

**2nd Quarter:**

**3.OA.A:** Represent and solve problems involving whole number multiplication and division.

- **3.OA.A.1-** Interpret products of whole numbers as the total number of objects in equal groups (e.g., interpret 5 x 7 as the total number of objects in 5 groups of 7 objects each).
- **3.OA.A.2 -** Interpret whole number quotients of whole numbers (e.g., interpret 56 ÷ 8 as the number of objects in each group when 56 objects are partitioned equally into 8 groups, or as a number of groups when 56 objects are partitioned into equal groups of 8 objects each).
- **3.OA.A.3-** Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities.
- **3.OA.A.4-** Determine the unknown whole number in a multiplication or division equation relating three whole numbers For example, determine the unknown number that makes the equation true in each of the equations 8 x □ = 48, 5 = □ ÷ 3, 6 x 6 = □.

**Reveal Unit: 3-4**

**3.OA.B:** Understand properties of multiplication and the relationship between multiplication and division.

- **3.OA.B.5-** Apply properties of operations as strategies to multiply and divide. Properties include commutative and associative properties of multiplication and the distributive property. (Students do not need to use the formal terms for these properties.)
- **3.OA.B.6-** Understand division as an unknown-factor problem (e.g., find 32 ÷ 8

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| | by finding the number that makes 32 when multiplied by 8).<br><br>**Reveal Unit: 3**<br><br>**3.OA.C**: Multiply and divide within 100.<br><br>**3.OA.D:** Solve problems involving the four operations, and identify and explain patterns in arithmetic.<br><br>• **3.OA.D.8 -** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Utilize understanding of the Order of Operations when there are no parentheses.<br><br>**Reveal Unit: 2-5**<br><br>**3.OA.D.9:** Identify patterns in the addition table and the multiplication table and explain them using properties of operations (e.g. observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends)<br><br>**3.NBT.A.3 -** Multiply one-digit whole numbers by multiples of 10 in the range 10 to 90 using strategies based on place value and the properties of operations (e.g., 9 x 80, 5 x 60). |
| **3rd Quarter:**<br>**3.MD.C:** Geometric measurement: Understand concepts of area and perimeter.<br><br>• **3.MD.C.5 -** Understand area as an attribute of plane figures and understand concepts of area measurement.<br>• **3.MD.C.6 -** Measure areas by counting unit squares (e.g., square cm, square m, square in, square ft, and improvised units).<br>• **3.MD.C.7 -** Relate area to the operations of multiplication and addition.<br><br>**Reveal Unit: 6** | **4th Quarter:**<br>**3.MD.A:** Solve problems involving measurement<br><br>• **3.MD.A.1a** - Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes (e.g., representing the problem on a number line diagram).<br><br>**Reveal Unit: 11**<br><br>**3.MD.A.2:** Measure and estimate liquid volumes and masses of objects using metric units. (Excludes |

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**3.MD.C.8:** Solve real-world and mathematical problems involving perimeters of plane figures and areas of rectangles, including finding the perimeter given the side lengths, finding an unknown side length. Represent rectangles with the same perimeter and different areas or with the same area and different perimeters.

**3.NF.A:** Understand fractions as numbers.

- **3. NF.A.1 -** Understand a fraction (1/b) as the quantity formed by one part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b
- **3. NF.A.2 -** Understand a fraction as a number on the number line; represent fractions on a number line diagram.
- **3. NF.A.3** - Explain equivalence of fractions in special cases and compare fractions by reasoning about their size.

**Reveal Unit: 7-8**

**3.G.A.2:** Partition shapes into b parts with equal areas. Express the area of each part as a unit fraction 1/b of the whole. (Grade 3 expectations are limited to fractions with denominators b = 2,3,4,6,8.)

compound units such as cm3 and finding the geometric volume of a container.) Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units. Excludes multiplicative comparison problems (problems involving notions of "times as much"). See Table 2.

**3.MD.C** Geometric measurement: Understand concepts of area and perimeter.

- **3.MD.C.7.D**. - Understand that rectilinear figures can be decomposed into non-overlapping rectangles and that the sum of the areas of these rectangles is identical to the area of the original rectilinear figure. Apply this technique to solve problems in real-world contexts.
- **3.MD.C.8** - Solve real-world and mathematical problems involving perimeters of plane figures and areas of rectangles, including finding the perimeter given the side lengths, finding an unknown side length. Represent rectangles with the same perimeter and different areas or with the same area and different perimeters.

**Reveal Unit: 11**

**3.G.A:** Reason with shapes and their attributes.

- **3.G.A.1**: Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples quadrilaterals that do not belong to any of these subcategories.

**Reveal Unit: 11**

- *Endurance- Knowledge and skills of value beyond a single date*
- *Leverage- Knowledge and skills valuable in multiple disciplines*
- *Readiness for the next level of learning- Knowledge and skills that are necessary for success in the next grade level or the next level of instruction*