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|  | Whiteriver Unified School District | Year at a Glance2020-2021 | Grade 8 |
| Unit Name | Topic 1: Real Numbers  | Topic 2: Analyze and Solve Linear Equations | Topic 3 : Use Functions to  Model Relationships | Topic 4: Investigate  Bivariate Data |
| Dates |   |   |   |   |
| BigIdeas | **1.1- 1.3 Real Numbers NS** **\* Justify** whether a number is rational or not. **P****\* Differentiate** between a rational and irrational number. **P****\* Compare** and order rational and irrational numbers. **P****1.4-1.5 EE****\* Calculate** square roots and cube roots. **P**\* **Solve** equations with square and cubed roots. **P****1.6-1.7**  **EE**\* **Use** the properties of exponents to create equivalent expressions. **P**\* **Write** equivalent expressions with a negative or zero exponent. **P****1.8-1.10 EE****\* Estimate** large and small quantities using a power of 10. **P**\* **Use** scientific notation to write numbers. **P**\* **Perform** operations with numbers written in scientific notation. **P** | **2.1-2.4 EE****\*Solve** equations by combining like terms.**\*Solve** equations with rational coefficients**\*Use** the distributive property to solve equations**\*Explain** how to find the number of solutions to an equation**2.5-2.9 EE****\*Compare** proportional relationships presented in multiple ways**\*Find and Interpret** slope**\*Write and Graph** linear equations in the form of y=mx**\*Find and Explain** y-intercepts of equations | **3.1-3.2 F****\*Interpret** functions**\*Represent** functions in multiple ways**3.3 F****\*Compare** functions**3.4 F****\*Construct** functions to model linear relationships**\*Write** equations in the form of y=mx+b**3.5-3.6 F****\*Describe** qualitative graphs**\*Sketch and Analyze** linear functions | **4.1-4.3 SP (Supporting Standards)****\*Describe** associations found between plotted points**\*Determine** the strength of linear associations**\*Make** predictions based on scatterplot data**4.4-4.5 SP (Supporting Standards)****\*Construct and Interpret** a two way frequency table**\*Find and Interpret** relative frequency. |

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|  | Whiteriver Unified School District | Year at a Glance2020-2021 | Grade 8 |
| Unit Name | Topic 5: Analyze and Solve Systems of Linear Equations | Topic 6: Congruence and Similarity | Topic 7: Understand and Apply the Pythagorean Theorem | Topic 8: Solve Problems Involving Surface Area and Volume  |
| Dates |   |   |   |   |
| BigIdeas | **5.1-5.4 EE****\*Determine** the number of solutions to a system of equations**\*Solve** systems of equations by graphing**\*Solve** systems of equations by substitution**\*Solve** systems of equations by elimination | **6.1-6.4 G (Supporting Standards)****\*Translate** an object on a coordinate plane**\*Reflect** objects on the coordinate plane**\*Rotate** objects on the coordinate plane**\*Perform** a series of transformations**6.5-6.7 G (Supporting Standards)****\*Describe** congruent figures**\*Dilate** objects on the coordinate plane**\*Describe** similarity**6.8-6.10 G (Supporting Standards)****\*Find** unknown angle measures in transversals of parallel lines**\*Find** the measure of interior and exterior angles of triangles**\*Explain** similarity in triangles | **7.1-7.4 G (Supporting Standards)****\*Find** the hypotenuse or leg of a right triangle using the Pythagorean Theorem**\*Analyze** shapes when using the converse of the Pythagorean Theorem**\*Use** the Pythagorean Theorem in 3 dimensions**\*Find** the distance between 2 points using the Pythagorean Theorem  | **8.1-8.4 G (Supporting Standards)****\*Find** the surface area of cylinders, cones and spheres**\*Find** the volume of a cylinder**\*Find** the volume of a cone**\*Find** the volume of a sphere**\*Find** the volume of composite figures |