

STEMPilot Curriculum Alignment: Texas lead4ward

Standard	Description	STEMPilot Lesson	STEMPilot Worksheet
Math			
1.1D, 2.1D, 3.1D, 4.1D, 5.1D, A.1D	Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate		5.1 Altitude vs Speed
4.3D	Compare two fractions with different numerators and different denominators and represent the comparison using symbols $>$, $=$, or $<$	Adding & Subtracting Fractions Pg. 87	9.1 Adding and Subtracting Fractions
5.3E	Solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers	Ratios-Fractions Pg. 43	4.3 Ratios: Fractions
5.3K	Add and subtract positive rational numbers fluently	Adding and Subtracting Fractions Pg 87	9.1 Adding and Subtracting Fractions
5.3H	Represent and solve addition and subtraction of fractions with unequal dominators referring to the same whole using objects and pictorial models and properties of operations		9.1 Adding and Subtracting Fractions
5.7A	Solve problems by calculating conversions within a measurement system, customary or metric	MPH to Knots Pg 27	4.1 MPH to Knots
6.4E	Represent ratios and percent with concrete models, fractions, and decimals		4.3 Ratios: Fractions
6.5H	Convert units within a measurement system, including the use of proportions and unit rates	MPH to Knots Pg 27	4.1 MPH to Knots
7.4D	Solve problems involving ratios, rates, and percent, including multi-step problems involving percent increase and percent decrease, and financial literacy problems		4.2 Ratios
7.4C	Determine the constant of proportionality ($k = y/x$) within mathematical and real-world problems	Ratios-Fractions Pg. 43	4.3 Ratios: Fractions
7.4E	Convert between measurement systems, including the use of proportions and the use of unit rates	MPH to Knots Pg 27	4.1 MPH to Knots
7.9B	Determine the circumference and area of circles	Area & Circumference Pgs. 43-44	4.4 Area & Circumference

Science			
2.8B	Identify the importance of weather and seasonal information to make choices in clothing, activities, and transportation	Weather Pgs 68-82	
2.8C	Explore the processes in the water cycle, including evaporation, condensation, and precipitation, as connected to weather conditions	Weather Pg 68	
3.5B	Describe and classify samples of matter as solids, liquids, and gases and demonstrate that solids have a definite shape and that liquids and gases take the shape of their container	Weather Pgs 68-82	
3.6B	Demonstrate and observe how position and motion can be changed by pushing and pulling objects to show work being done such as swings, balls, pulleys, and wagons	Four Forces of Flight Pgs 18-23	2: Anatomy of Cessna 172 Pg 133
3.6C	Observe forces such as magnetism and gravity acting on objects	Gravity Pgs 18-19	
4.6D	Design an experiment to test the effect of force on an object such as a push or a pull, gravity, friction, or magnetism	Building Paper Gliders Pgs 12-13	
4.8B	Describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process	Weather Pg 68	
5.8A	Differentiate between weather and climate	Weather Pg 79	
6.8D	Measure and graph changes in motion	Altitude & Speed Pg. 39	5.1 Altitude vs Speed