SUBSTANCES AND PHYSICAL PROPERTIES- LEARNING MASTERY GRID

STANDARD FOCUS:

VOCABULARY TERMS: mixture, pure substance, solubility, density, melting point, boiling point, heterogenous, homogenous, metallic, non-metallic, compound, matter, solutions, colloids, suspensions, solute, solvent, atom

ACADEMIC TARGETS Level 5: Advanced Option TARGET: I can investigate a topic about how physical properties can change our understanding of the universe.	Level 5: Choose one of the following questions and create a presentation that explains your finding 1. How does hydrogen go from a gas on earth to a plasma on the sun? 2. How does liquid nitrogen change the physical properties of various substances? 3. How do we know what elements are in our universe? 4. How does a forensic scientist use physical properties to solve a crime?		
Level 4: Construct & Design TARGET: I can teach how to separate a mixture of a pure substance, mixture and a compound.	LO 4A: Important adult assignment		
Level 3: Compare & Contrast TARGET: I can compare and contrast elements, mixtures and pure substances using their physical properties.	LO-3A: Graphic Organizer - Draw/Analyze Need: Graphic Organizer Assessment: LO-3A Checkin Quiz Schoology	LO-3B: Inquiry Lab Investigation: Separate the Mixtures Need: Inquiry Lab Investigation Laptop simulation Worksheet Assessment: Lab answers	LO-3D: SUMMATIVE ASSESSMENT Complete summative assessment. You will have 3 chances to complete assessment. SCORE:_____ - 85% Mastery must be achieved. If it is not achieved after 3 tries, additional review activities must be completed.

Level 2: Apply and Demonstrate: TARGET: I CAN apply and demonstrate knowledge of physical properties and how they describe pure substances and mixtures. Define all vocabulary: solubility, density, melting point, boiling point, metallic, non-metallic, solution, colloid, suspension, solute, solvent	LO-2A: Physical Property Notes Vocab Sheet Need: Physical Property Reading Assessment: LO-2A Checkin Schoology	LO-2B: Density Lab Need: Density Lab and Materials Assessment: Lab sheet and reflection	LO-2C: Chromatography Lab Boiling/Melting Simulation Need: Chromatography Lab Assessment: Lab answers	LO-2D: Compounds/Mixture lab Categorizing Need: Compounds and Mixtures Lab **Assessment:** Student responses and explanations	
Level 1: Define and Recall TARGET: I CAN define and explain how matter is classified as elements, compounds, and mixtures (homogenous, heterogenous) Define all vocabulary: atom, matter, element, mixtures, compounds, homogenous, heterogenous, pure substance,	LO-1A: Matter Notes Complete all notes and activities in Nearpod Vocab worksheet **Need**: NEAR POD, guided note sheet and vocab sheet - in hanging file holder **Assessment**: LO-1A Checkin Exit Quiz in Schoology	LO-1B: Classifying Matter Reading **Need:** Reading, Classify Matter Note Organizer (In Hanging file) Science Notebook Vocab worksheet **Assessment:** LO - 1B Exit Quiz in Schoology	LO-1C: Quizizz Vocab review Need: Quizizz **Assessment:** LO-1C Exit Quiz in Schoology	LO-1D: Mixtures Inquiry with pictures SCORE:_____ **NEED:** Lab Assessment: lab answers	1D - Level 1 Mastery Successful completion of Elements, Compounds and Mixtures Level 1 quiz to show knowledge. 320242 Get Quizizz Code from Ms. Momany **85% passing** ATTEMPTS: 1 2 3 4 SCORE _____