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| M. Angileri | **6th grade science** | | **Lesson Plans 9-25-17 Structures of Matter 1** | | | | |
| NGSS Standard | **MS-PS 1-1**  **PS1.A**  **S &E**  **CCC** | | |  |  | | --- | --- | |  | Develop models to describe the atomic composition of simple molecules and extended structures. |   **Structure and Properties of Matter**  Substances are made from different types of atoms, which combine with one another in various ways. Atoms form molecules that range in size from two to thousands of atoms.  Solids may be formed from molecules, or they may be extended structures with repeating subunits (e.g., crystals**)**  ***Developing and Using Models:*** Develop a model to predict and/or describe phenomena  ***Scale, Proportion, and Quantity:***  Time, space, and energy phenomena can be observed at various scales using models to study systems that are too large or too small. | | | | |
| Vocabulary: | | **Matter:** Anything that has mass and occupies space.  **Chemistry:** The study of the properties of matter.  **Substance:** A single kind of matter that is pure and has a specific set of properties.  **Physical property:** A characteristic of a pure substance that can be observed without changing it into another substance.  **Chemical property:** A characteristic of a pure substance that describes its ability to change into a different substance.  **Element:** A pure substance that cannot be broken down into other substances by chemical or physical means.  **Atom:** The basic particle from which all elements are made.  **Chemical bond:** The force that holds two atoms together.  **Molecule:** A particle made of two or mare atoms bonded together.  **Compound;** A pure substance made of two or more elements chemically bonded.  **Mixture:** Two or more substances that are mixed together but are not chemically combined.  **Solution:** An example of a homogeneous mixture; forms when substances dissolve. | | | | | |
|  | | **MONDAY** | | **TUESDAY** | **WEDNESDAY 1/2 day** | **THURSDAY** | **FRIDAY** |
| Content Objective: | | SW demonstrate comprehension of the Describing Matter text by summarizing the text using a guided reading. | | Students will demonstrate their level of understanding by taking the fall NWEA science test. | SW demonstrate knowledge of structure of matter vocabulary by defining words using the cognitive dictionary template. | SW demonstrate application of the structure of matter concepts by modeling increasingly smaller particle sizes in the Smallest Bit activity. | SW demonstrate knowledge of the periodic table of Elements as it relates to the structure of matter by identifying attributes of elements. |
| Language objective | | SW write to answer questions about the structure of matter using sentence frames. | | Students will read to take the fall NWEA science test. | SW write to define structure of Matter vocabulary using the cognitive dictionary template. | SW write/orally explain the connections between the activity and the structure of matter activity and the atomic size of particles using the hook activity. | SW write/orally make connections among the periodic table and the structure of matter using guided questioning. |
| In class today | | Vocabulary predictions  Read and discuss Describing Matter: pages 6-14  Student notetaking on Guided Reading | | NWEA testing | Vocabulary: definitions and pictures  Study Jams: Matter | Why are atomic models necessary?  Hook activity: The smallest bit. | Explore Activity: Element Symbols |
| Learning Target | | I can summarize information about the structure of matter using a guided reading exercise. | | I can demonstrate my scientific knowledge by taking the NWEA fall test. | I can define and illustrate the Structure of Matter vocabulary. | I can use scientific modeling to explain the size of atomic particles. | I can make connections among the periodic table and the structures of matter. |