Science Log - 5th

Topic: Matter

Learning Goals:

- I. Create models of molecular compounds models.
- 2. Identify mixtures and solutions of different combinations of matter.
- 3. Categorizing (sort) different types of matter we discover in nature.

| What do you already know about the topic? | What do you want to know about the topic? | What did you learn about the topic? |
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Vocabulary

| Observation | Statement made from using your senses |
|-------------|---|
| Matter | Anything that has mass and takes up space (volume) |
| Mass | The amount of matter (stuff) in an object |
| Gas | Assumes the shape of its container; assumes the volume of its container; compressible; flows easily |
| Liquid | Assumes the shape of its container; has a definite volume; not easily compressible; flows easily |
| Solid | Retains a fixed shape; has a definite volume; not easily compressible; does not flow easily |
| Mixture | Combination of two or more substances that can easily be separated |
| Solution | Special type of mixture in which one substance dissolves in another |
| Compound | When two or more elements combine to form a new substance |
| Atom | Smallest part of an element |
| Molecule | Smallest part of a compound |



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Mix It Up

Supplies: 3 liquids (ex: water, juice, milk, soda, vinegar) and 3 solids (ex: rice, corn, Kool-Aid, beans), 6 small cups, tweezers, coffee filter, spoon

Directions:

- I. Choose 3 liquids and 3 solids.
- 2. Fill small cups halfway, each one with a different liquid or solid you have chosen.
- 3. Choose two cups that you want to combine. Record which two you choose on the chart below.
- 4. Make a **prediction**: Will these two components, together, become a **mixture** or a **solution**?
- 5. Combine those two components together and stir them well.
- 6. Use different tools to try to separate those two components. If you can separate them, then you have created a **solution**. If you could not sperate them, then you have created a **mixture**.
- 7. Record your **outcome** and **explain** how you came to that conclusion.
- 8. Repeat steps 2-7 two more times!

| | Component #I | Component #2 | Prediction | Outcome | Explain |
|----------------|--------------|--------------|--|--|---------|
| COMBINATION #1 | | | MixtureSolution | MixtureSolution | |
| COMBINATION #2 | | | MixtureSolution | MixtureSolution | |
| COMBINATION #3 | | | MixtureSolution | MixtureSolution | |