**Exploring** **Density Through Mixtures and Solutions Worksheet**

**Challenge:** Each group is tasked with creating a mixture or solution that will be the densest, using the following substances:

* sugar
* vegetable oil
* olive oil
* vinegar
* baby oil
* corn syrup
* liquid starch

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| **Imagine** | | |
| Sketch or write out different combinations you think will make the densest mixture or solution. | | |
| **Plan** | | |
| Sketch or write down your group’s chosen mixture or solution. | | |
| **Create / Observations** | | |
| What do you observe about your mixture / solution? For example, what color is it? Is it clear? Are there clumps in it? | | |
| **Test** | | |
| **Group/Participants** | **Mixture/Solution Contents** | **Results** |
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| **Improve** | | |
| What do you want to change or improve to make your mixture or solution denser? Why? **to your mixture or solution?** | | |
| **Retest** | | |
| **Group/Participants** | **Improved Mixture/Solution Contents** | **Results** |
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