**Science Lesson #1**

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| Topic | Density |
| Curricular Connection | Properties and interactions of familiar liquids and solids: density  |
| Video Activity  | Abby, representing *Water*, freestyles through the room flowing and splashing as water would if it were shaken up. After a short time, Marley who is representing *Honey* joins in with Abby, dancing a little less aggressively but moving in all of the same places as Abby is able to dance. When the music stops Abby and Marley both freeze, but Marley has to freeze in a position that is lower than Abby. After practicing this, Rylee is added to the dance as *Oil*. Rylee also dances around the room with the girls but when they freeze Rylee must freeze in a position that is higher than Abby and Marley in a position lower then Abby, to represent how oil, honey and water will always separate. Rylee explains how this describes density.  |
| Supplementary Activity Options | Students will be assigned either Honey, Water, or Oil. Students labeled as water will start in the space dancing and moving about freely. Teachers can then ask honey to join the freestyle dance. Honey can move around the space with water as long as everyone is moving, once the teacher stops “stirring the students”, all of the honey dancers must pose lower than all the water dancers. After a few freezes, the teacher will add in the oil dancers and start “stirring” again. Once the teacher stops stirring, the honey should end up lower than the water once again and the oil should pose higher. We can check this by having students wear pinnies based on their name.Evaluating each students understanding of density can easily be done by switch up the students jobs or even adding in additional levels of density.  |
| Extension Information | * This can be connected to lessons about oil spills and why the oil stays atop the water, leading into inquiries about how best to clean up the oil, or how the oil can negatively affect our environment.
* While students are dancing together be sure that they know not to dance together (holding hands or interacting together) unless they are in the same category, connect this to immiscibility.
* This can be a fun elimination game to play as a brain break or in gym class. If a student poses in the wrong position in correlation with another density they are eliminated.
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