## ACTIVITY 2: Phase Separation

Activity Objective: Describe an experiment to demonstrate the phase separation of alcohol, water, and gasoline

Materials: Chapter 6, paper, computer, printer, Internet Access

Definition All alcohols absorb water, and the alcohol–water mixture can separate from the gasoline and sink to the bottom of the container. This process is called *phase separation*. This condition can cause moisture to accumulate in the container as a result of condensation of the moisture in the air.

Procedure:

1. Work as partners or small teams
2. Research and brainstorm fluid phase separation
3. Locate a video on the process of phase separation
4. Based on the text in chapter 6 and an Internet search, create a detailed experiment on a separate document that will show the phase separation of fuels.

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| **4** **World-Class Learner** | **3** **Proficient Learner** | **2** **Developing Learner** | **1****EmergentLearner** |
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| **Learner at this level has gone beyond mastery of knowledge, skills, & attitudes described in project. World-class learner consistently exhibits high-quality performance.** | **Learner at this level has had opportunities to apply knowledge, skills, & attitudes of component of project. Proficient learner has mastered essential attributes, thus proving mastery.** | **Learner at this level has been exposed to & had opportunity to apply knowledge, skills, & attitudes of project. Developing learner may have only a few essential attributes to master before mastery.** | **Learner at this level may or may not have been exposed to knowledge, skills, & attitudes required by academic standards of the project.** |

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|  | **1= Emergent Learner** **2 = Developing Learner****3 = Proficient Learner** **4 = World-Class Learner** |