

### **ACTIVITY 3: Smart Appliances**

**Activity Objective:** Design a plan with electrical usage for your school, home, or worksite that will improve sustainability through the use of smart appliances.

**Materials:** Chapter 13, paper, computer, printer, Internet Access, smart devices

**Definition:** Appliance manufacturers are now offering smart connectivity, promising convenience features such as: remote control, automatic supply replenishment, or intelligent energy consumption. All of these applications work toward greater sustainability of our environment. Figure 6 shows a Smart Refrigerator, which is a smart thing being controlled by a smart phone device, which becomes a smart manager. Each company has its own standards, modules, hubs, and brands that might make the appliance smarter, but can certainly make a layman feel dumb.

#### **REVIEW VIDEOS:**

The Kitchen of Tomorrow | HowStuffWorks NOW:

<https://www.youtube.com/watch?v=x8HnHyohL5o>

Best 'Smart Home' Tech of 2015: <https://www.youtube.com/watch?v=yjiQWmy1vCI>

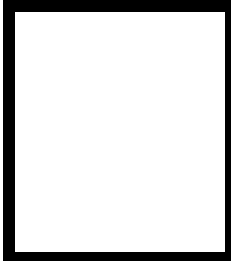
#### **Procedure:**

1. Work as partners or small teams.
2. Research and brainstorm the use of smart appliances in your home, school, or worksite that will improve sustainability through reduced use of electricity.
3. Create a floor plan that shows the placement of the smart appliances
4. Create a chart that shows the current use of wattage on the appliances and the reduced achieved using the smart appliances.
5. Develop a graph to show the sustainability improvement.



RUBRIC

<b>4 World-Class Learner</b>	<b>3 Proficient Learner</b>	<b>2 Developing Learner</b>	<b>1 Emergent Learner</b>
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.



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