

Design a Grocery Store Learning Targets

Project Learning Target One	There are different types of grocery stores (e.g., discount, corner, supermarket, specialist, etc.). Despite this variety, there is still organization, research, and thought involved in setting up each type of grocery store – much like the fact the periodic table is a highly thought-out organization of elements.
Project Learning Target Two	Grocery stores contain many different items, from hundreds to perhaps tens of thousands. The number of items at a grocery store will depend on the type of grocery store. The periodic table contains 118 natural and synthetic elements.
Project Learning Target Three	Grocery stores contain aisles that are often numbered on the ends or even on a sign hanging from the ceiling. Customers may request a particular item and then receive instructions to go to a specific aisle number. Each aisle typically has a major theme, such as “International Food” or “Dairy Products.” Rows or columns on the periodic table also have common themes based on similar or dissimilar chemical properties.
Project Learning Target Four	Each aisle in a grocery store contains similar types of items. The items change from one end of the aisle to the other. For example, the “Dairy Aisle” may be Aisle 10 in a supermarket. One end of Aisle 10 may be where the milk is located. Then, the products transition to creamer, eggs, cheese, and sour cream. Likewise, on the periodic table, a group of elements has similar chemical properties due to them all having the same number of valence electrons. For example, Group 1 elements – also called the alkali metals – possess one valence electron. Group 1 elements are highly reactive. The reactivity of the elements increases moving down the group from hydrogen (H) to francium (Fr).
Project Learning Target Five	There may be transitions of items across the store from side to side or front to back. For example, Walmart in Huber Heights has food items on the left-hand side of the store. The middle of the store has clothing. The right-hand side of the store has non-food items such as toys, home items, kitchen goods, and outdoor things. The overall pattern of transition is from food items to non-food items. The transitions vary based on the specific type of store (e.g., discount grocery store versus supermarket), as well as the particular arrangement. The periodic table has transitions across the entire length, from metals, to transition metals, to metalloids, and to nonmetals.
Project Learning Target Six	The lanthanide and actinide series are both displaced below the periodic table to make the table more easily fit on a sheet of paper. The lanthanide and actinide series are part of Period 6 and Period 7, respectively. If these series were part of the main periodic table, then the entire width would be twice as large. Moving the series down a bit is a matter of convenience. Sometimes you may observe parts of a store aisle may be moved to a more convenient location, so customers may choose to purchase item(s). For example, charcoal may be moved from an aisle to the center walkway on the Fourth of July to help people remember to purchase more, which increases the amount of money earned. Further, cases of soda or beer may be moved to the main, center aisle on holidays or before the Super Bowl to increase sales. Moving products from aisles may be done to improve sales.