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| Name: | Period: | Date: |
| Date Started: | Due Date: | |
| Group Members: | | |
| Advanced Design Applications  Learning Cycle 1: Manufacturing Unit 4  File 1.3 Spin-Offs Activity | | |

**Spin-Offs Activity**

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| **Background** | Most of the time materials, products, or processes are developed for specific purposes. However, sometimes the materials, products, or processes developed for a specific purpose are applied to meet a need in a different situation or context. For example, in the early  1970s an inorganic zinc-silicate coating material called IC-531 was developed at NASA’s Goddard Space Flight Center. NASA developed this material to protect the launch structures at Kennedy Space Center from salt corrosion, rocket exhaust, and thermal shock.  More than a decade later, IC-531 turned out to be the perfect coating to protect the interior structure of the Statue of Liberty and prolong the statue’s life. This coating material has also been used to protect the Columbia River Bridge, as well as power transmission stations used by power utility companies. |
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| **What to Do** | * You will work within a team of three to four people during this activity. * You should obtain an Oscar Mayer Lunchable® box, a piece of flip chart paper, and a marker. * Each team will be examining one Lunchable® box. * One person from the team should assume the role of a recorder and write the group’s responses to the following questions.  1. From what initial product did this spinoff product originate (think about the container)? 2. What need does this new product fill? 3. Who was the original target consumer for this product? 4. Who will purchase this product and what is this person’s primary motivation for making the purchase? Is the quality of the contents within the package a major consideration? 5. Think about the primary use of this product. What product was replaced when the Lunchable® was introduced? Was the Lunchable® an improvement? Explain. 6. Does this product make life better for users? Explain. |
| **Conclusion** | * After the team has responded to the above questions, your teacher will organize a class discussion, during which each team will share team answers (to the above questions) with the entire class. * While continuing to consider the Lunchable® example, consider the following scenarios.   + If you were asked to redesign the Lunchable® to attract the attention of business people, what changes or additions would you make to the product?   + If the Lunchable® were to be used during business luncheons, how would the product need to change?   + If you were the product design team working on this project, how would the team members determine what should be included in the “Business Lunchable®” product? * On a large piece of flip chart paper, create a flip chart that identifies the steps needed to identify your consumer needs. |