

Lifecycle Analysis of a Product Handout **Teacher Notes**

Be sure to caution students that, in the case of an open loop lifecycle, there may be many possible endpoints for a particular original product, and they should analyze all of those endpoints. In addition, some endpoints may be more favorable than others. For example, for plastic bottles.

- Some may end up in landfills
- Some may end up in garbage patches in the ocean or elsewhere in the environment
- Others may be repurposed and used to manufacture another type of product

Some teams may need assistance in selecting a product. The following is a list of possible suggestions for products/products to choose:

- Plastic water bottle
- Clothing
- Consumer cleaning products
- Fast food containers
- Styrofoam food containers (keep in mind if you are doing lesson 2 it will include research around polystyrene products)
- Furniture
- Toothbrush
- Packaging materials

Once teams determine their consumer product, it would be good if they could contact the stakeholder(s)/end users/experts of this product and of the alternative, more sustainable product. These people could be a support for the teams and a part of the **Final Event.** You may want to consider communicating with these groups if your students are not completely comfortable doing so.

For example, if a team wants to research bleach and then bleach alternatives for school, they would contact the janitorial department and ask some members to give information on their experience of the product and what they think of the alternative products. These janitors would be part of the final event, along with whoever is in charge of the school's budget. Teams may also talk to local environmental groups.