

Needs and Wants

An NIU STEAM activity



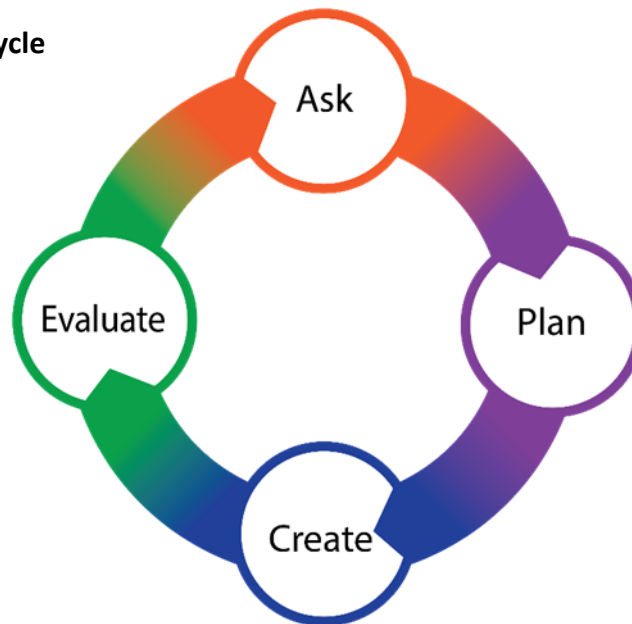
Overview & Key Terms

Need – something that is required for survival. For humans, these into four categories: food, water, shelter, and clothing.

Want – something that is not required for survival but you would like to have. These include both luxury and practical items.

Design Cycle – a repeating process used to question and then plan, create, and evaluate a proposed solution to your question, using a cyclical set of steps.

NIU STEAM Design Cycle





Procedure

Part One

1. Ask your child to differentiate between a need and a want. How are the two alike and in what ways are they different? How do you decide if something is a need or want?
2. Together with your child, browse through a variety of Black Friday ads (include grocery, clothing, housing goods, toys, etc.). Have your child cut out all of the items she wants from the ads. Next take a sheet of paper and draw a t-chart listing **wants** on the top of one section of the chart and **needs** on the top of the other section. Have your child place the items they cut out in the appropriate category on the chart. Talk with your child about each of the items on their chart and ask her to explain her reasons for categorizing each item as such.
3. Ask your child, if he was only permitted to choose three of the items he cut out to have for the next week, which three items would he choose. Next ask why he chose those items and why he thinks those items are more important than the other items he had cut out. Are the items he chose needs or wants? Ask him to predict how well he would survive with just those three items.
4. After discussing the items and the reasons for choosing each, give your child the opportunity to choose different items, if he would like. He can keep what he originally picked or put back as many items as he would like and select different ones.
5. If your child swaps out different items, ask why he chose the new items and why he now thinks those items are more important than the items he had originally selected.

Part Two

1. Brainstorm a list of things in your home that are needs (roof, walls, food, etc.).
2. Brainstorm a list of wants for your family, however, the items on this list must be something that can be created, such as a learning aid or a type of organizational storage. As a family, choose one item from your list that you most want.
3. Talk about the different steps of the Design Cycle. Use the Design Cycle to think about the item your family chose in step 3 above. Begin the challenge by talking with your family about why you choose this item. How do you think this item will help your family?
4. Next, work together to create a plan for ways you could get and make use of this item.
5. Then, work together to create a drawing showing what life would be like for your family with this item.
6. Once you have completed your drawing, ask everyone to think about how having this item will make life easier or more enjoyable for everyone in your family? Evaluate the cost and benefits of getting this item for your family. Ask yourselves, are there other ways you could still make life easier or more enjoyable for you family without getting this item? If so, go back to step 3 and begin the Design Cycle process again.

