

Bird Feeder – Made from Reused Materials

Difficulty – Medium (adult assistance required)

Learning Objectives

1. What is waste?
2. Waste management people vs nature.
3. In this activity you will use S.T.E.A.M learning process using the, Engineering Process to complete your bird feeder from reused materials.

Materials

- Scissors
- Glue and or tape
- Markers or paint
- String
- Assortment of items that can be reused for this craft

Resources

Watch - "What is a Resource": https://www.youtube.com/watch?v=1_X3Gb86ZIE

Watch - "Too Good to Waste": <https://www.youtube.com/watch?v=VP54rKPFYI&t=16s>



Activity #1 – Waste Management

Explore

What is Waste? Waste is, “A material, substance, or byproduct) eliminated or discarded as no longer useful or required after the completion of a process”.

1. What are some examples of material waste you see in your home? List below:

e.g. old newspaper

2. What are some types of waste you would see in nature? List below:

e.g. dead twigs

Hint: Garbage and waste can be considered the same as they both refer to a material that is considered no longer useful for its original use.



Examine

Nature and people often manage waste very differently. Nature does not like to waste anything so even the "waste" it produces get reused or recycled so the resources that went into making it in the first place are not lost.

Let's take a look at an example of how nature reuses waste:

"Waste"



REUSED

Resource



A tree has branches and twigs. These branches and twigs grow from the trunk of the tree they hold the leaves towards the sun so the tree can get nutrients to grow big and strong. As the tree grows it will lose some of these branches and they are now "waste".

Birds need materials to build their nests they will use all sorts of different things but many birds will use the twigs and branches that have fallen from the tree. The branches were originally to help the tree but will now be reused by the birds to make their nest.

P.s. Another way nature prevents waste is recycling and you can too! Learn recycling ins and outs here:

<https://www.lethbridge.ca/living-here/Waste-Recycling/Pages/Waste-Wizard.aspx>.



Examine

Sometimes people manage their waste very differently and waste is thrown away along with all the energy and resources that went into making it in the first place, it really becomes waste.

In Lethbridge we send 24,000 tonnes of material to the landfill each year!



"Waste"

GARBAGE



Wasted

In this example an empty milk container is waste. If we throw it away, we lose that resource. Or we can reuse it and make it into a useful bird feeder.



"Waste"

REUSE



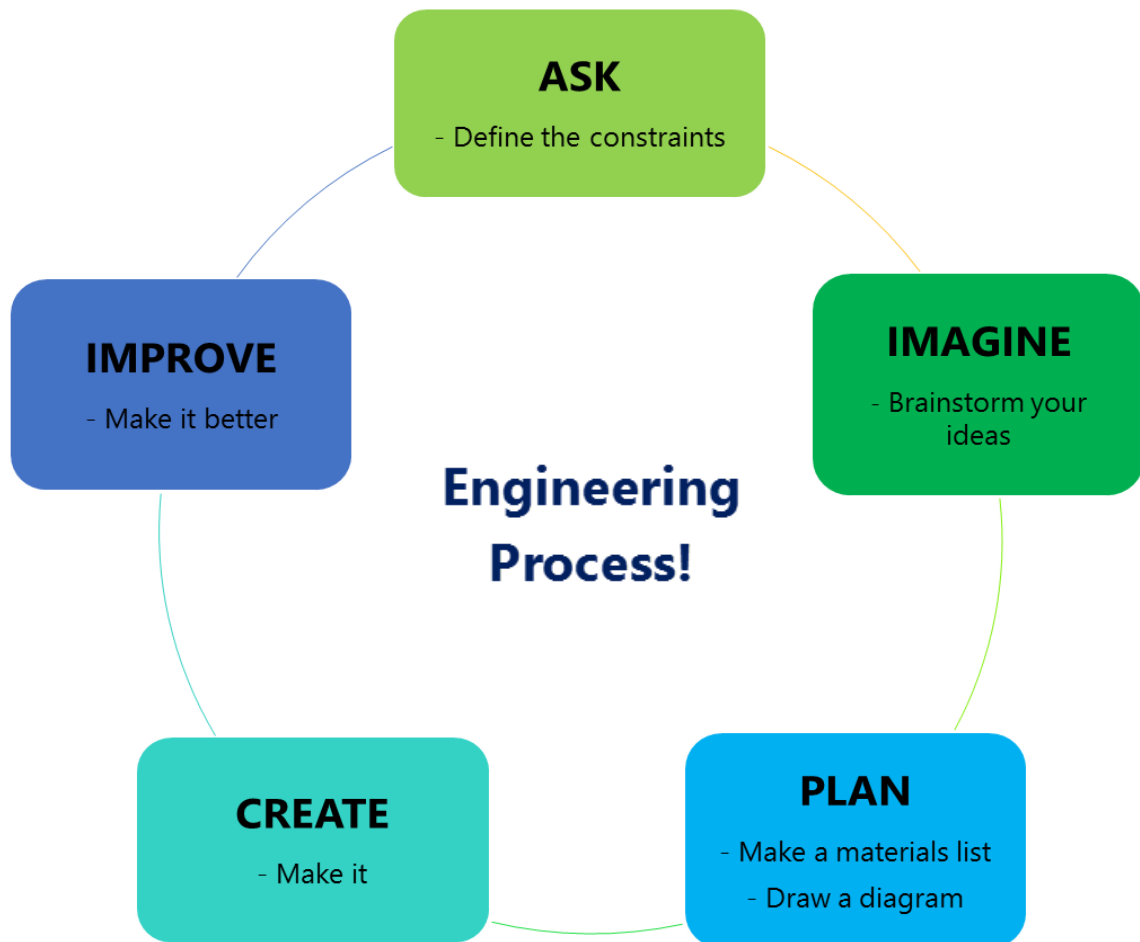
Resource

Activity #2 - Build a Reused Material Bird Feeder

Intro

For this activity we are going to use the engineering process which is a common process in S.T.E.A.M (Science, Technology, Engineering, Arts and Math) activities. What is the engineering process? The engineering process is, "a common series of steps that engineers use in creating functional products and processes". There are 5 steps in the process: Ask, Imagine, Plan, Create and Improve.

The engineering process promotes, critical thinking, imagination, exploration and problem solving.



Activity Goal

Reuse old materials from around the house and yard that might otherwise be thrown away to make a bird feeder for our feathered friends and making the most out of the things we have.

*Make sure to check any materials with a grown-up before using them for this craft.

Activity Inspiration

To help get you started here is a bird feeder example. This one is made of wood, yours will be made out of reused materials. This is just for inspiration yours can and probably will look very different!



Hint: Empty milk cartons can make a great body for a bird feeder.



Step 1: Ask

What must I include for this bird feeder to work (e.g. does it require a place for the bird to sit?)

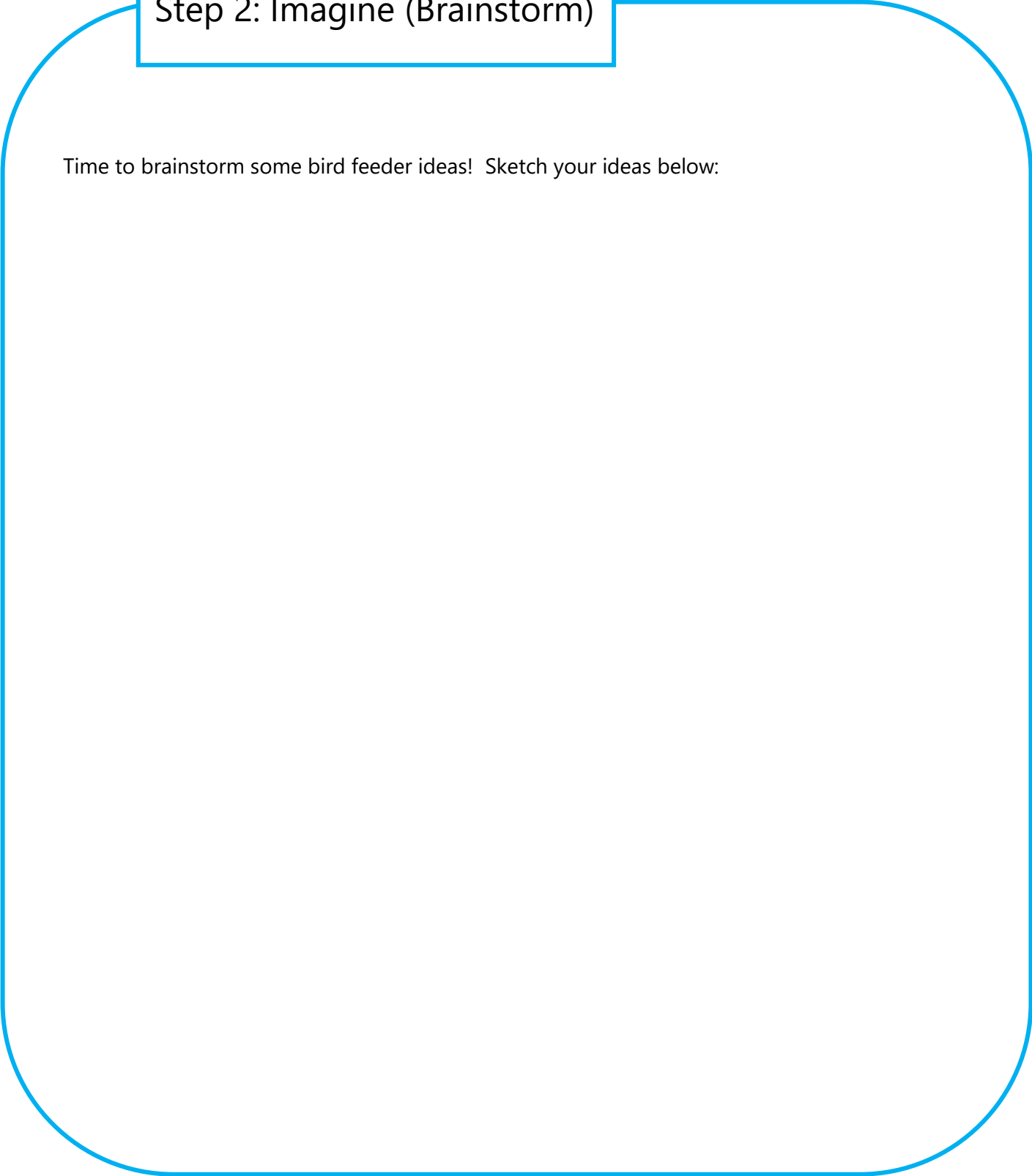
What should I avoid with this bird feeder that might keep it from working (e.g. since you will be hanging your bird feeder should you make it out of heavy objects)?

How will you decorate your birdfeeder, will you use paint will you glue things on?



Step 2: Imagine (Brainstorm)

Time to brainstorm some bird feeder ideas! Sketch your ideas below:



Step 3: Plan (Materials List)

Now that you have some great bird feeder designs you will need materials to make them. Look around your house and yard for things that are no longer useful for their original use. Let's reuse these materials to make and decorate your bird feeder.

Suggestions:

- Pop bottle
- Egg carton
- Milk carton
- Bits of string or twine
- Popsicle sticks
- Dead twigs or dead branches
- Dried up leaves



Step 3: Plan (Draw it)

So now that you have some great bird feeder ideas pick your favorite idea that you think will make the most functional bird feeder. Once you have made a decision draw and label a diagram of your idea below:



Step 4: Create & Evaluate

Now it is time to make your bird feeder and test it out. Add some birdfeed to the feeder and hang it outside.

1. Did you have any issues when making your bird feeder?
2. Did you have to make any changes to your original design?
3. Would you do anything differently next time?

Step 5: Improve

Observe your bird feeder, are birds visiting your feeder? What changes could you make to improve it?

