Challenge #3

CREATE: INNOVATIVE GARDEN TOOL

Garden Tools are thought to have originated alongside the earliest agricultural processes developed by humans some 12,000 years ago. The earliest tools were made of wood, flint, metal, tin, and bone.

While most tools today are made in factories for easy store pick-up, farmers and gardeners the world over still make their own out of recycled household materials in order to both save money and customize tools to their needs. Check out some of these simple tools that were repurposed from other things:

Every item that is repurposed is another item that does not contribute to the overflowing of landfills! So let's create something wonderful from the materials you would otherwise discard!

CHALLENGE DETAILS:
Your Innovative Garden Tool needs to:
- Be made of recycled materials ♻️
- Accomplish more than one task
- Demonstrate clear innovation beyond garden tools that already exist

EARN AN EXTRA RAFFLE TICKET!
By showing how the tool would function in one of two ways:
- Taking a picture of you using the tool to do garden work
- Taking a picture or video of moving parts that are included in your design
HOW TO GET STARTED:
Take a look at this path you could take to figure out a design for your garden tool! There’s more than one way to come up with an idea - this is just one way to help you get started.

1. **Write down all of the garden tools you can think of.**

2. **Write each garden tool on its own individual slip of paper.**

3. **Randomly select two garden tools from your pile.**

4. **Draw a rough sketch of what each of your tools looks like.**
5. Write down its purpose and look for features or functions each tool has in common with the other.

6. Set a timer to 2:00 and draw out as many different ideas as you can think of that combine the two tools.

7. Ask yourself: Is this design useful? Is it feasible? Could I make a working prototype?

8. If you find a design, move onto the next step; Make a Plan! If you don’t, try again! Start over at Step 3.

**You might also try thinking about how the garden tools are used and which tools might be used together for the same task - then you could brainstorm how you might improve upon that tool!**

MAKE A PLAN AND START BUILDING!

Make a more detailed sketch of your design. Identify constraints and materials you might use for each part.

Gather materials, and start building!

If you want to show us that your prototype is usable, you might need to prototype. Try to test and see whether your tool works for its intended purpose. If it doesn’t, make small changes to your design and try again!

PHOTOGRAPH:

Take a photo of your final product! We want to see it!