

NON-EDIBLE GINGERBREAD HOUSE STEAM CHALLENGE



You and your teammates must design and construct a non-edible gingerbread house.

Here is a list of materials you will HAVE to carry out your plan:

- 1 cardboard box
- 10 sticks of filament (colors: red, orange, yellow, green, blue, gray, white, mint)
- 1 paper towel tube
- 1 brown paper grocery bag

Your team may bring in materials listed here once approved by the teacher. You may not use money to purchase these materials. They must be meet the 3R requirement (reused, recycled, repurposed).

Teacher Signature

Here is a list of materials you will have access to while you are working:

- An adult with a hot glue gun
- An adult with a box cutter/knife
- iPads with the 3Doodler App
- Internet access
- Rulers
- Cardboard scissors
- Tape
- 2 X 3Doodler Start Pens
- Markers
- Crayons
- Elmer's glue (liquid and stick)
- Classroom "Upcycle" Materials Bin

1. Create the blueprints for your house! Draw and color your house design with as much detail as possible. Be sure you have all the required structures (exterior walls, 1 door, 2 windows, roof, gingerbread person). **Label each part of your plan with the materials you plan to use to construct it.**

2. Write the steps you will use to construct your house. Next to each step, write the name of the team member who will be responsible for completing that step. (Remember that more than one person can work on each step!)

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

