

Name: _____

CREATE A WINNING DESIGN

In “Home Sweet Home” (p. 12), you read about engineers who hold a contest every year to build the sturdiest gingerbread house. Test the building skills of your class by entering the *Science World* contest for the most spectacular gingerbread house design. Editors will select their three favorites from all eligible entries. How can you use what you learned about building a strong structure to create a winning design? Follow the steps below to plan your design.

Visit www.scholastic.com/scienceworld to learn more about the Gingerbread House Contest.

STEP 1: Plan Your Design

Describe the design *criteria* for your gingerbread house. What standards does it need to meet to be successful? The contest rules state that your house must have more than one level. Describe at least two other criteria that you think your house should meet.

- More than one level
- _____
- _____

According to the contest rules, one *constraint*, or limitation, on your design is that it must be made only from edible materials. Can you think of any other constraints to take into account, such as cost or time?

- Made only from food
- _____
- _____

STEP 2: Brainstorm a Design

Draw a sketch of your gingerbread house design. Remember that your model should be detailed so that you can use it as a guide when you build your house. It should include measurements and descriptions of the materials that will be used.

STEP 3: Create a Step-By-Step Plan

Using your model as a guide, consider the steps you will take to construct your house. Write a detailed plan before beginning to build. Include a list of materials.

- Why might it be helpful to first build the house out of cardboard?
- Will you decorate the walls before or after the house has been assembled?

STEP 4: Extra Credit, Build your house and take a picture to share with the class on January 6th!