

Over The River

Problem: Every time the gingerbread man comes to the river the Sly Fox tricks him and eats him.

Challenge: Build a bridge so the gingerbread man won't need to rely on the fox for help.

Challenge details:

- your bridge must not touch the river.
- your bridge must be able to stand on its own.
- your bridge must be able to hold the weight of the Gingerbread Man without breaking.
- the river is 4 inches wide.

Materials:

- marshmallows
- toothpicks
- blocks
- paper
- tape
- yarn

Design your bridge below. Make a detailed diagram of what you want your bridge to look like.

Design 1

Design 2

	Design 1	Design 2
Number of marshmallows		
Number of toothpicks		
Length of bridge		
Did your bridge hold the weight of the gingerbread?		

Building a Boat

Problem: Every time the gingerbread man comes to the river the Sly Fox tricks him and eats him.

Challenge: Build a boat so the gingerbread man won't need to rely on the fox for help.

Challenge details:

- your boat must float.
- your boat must be able to hold the weight

of the Gingerbread Man without sinking or tipping over.

Bonus Challenge:

-Can you build a boat that uses wind to cross the water?

Materials:

- boxes
- paper
- popsicle sticks
- tin foil
- recyclable plastic containers

Design your boat below. Make a detailed diagram of what you want your boat to look like. Be sure to label the materials you are using.

Design 1

Design 2

	design 1	design 2
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Did your boat float?		
Did your boat hold the weight of your gingerbread without sinking or tipping over?		

Design your trap below. Make a detailed diagram of what you want your trap to look like. Be sure to label the materials you are using.

Design 1

Design 2

	design 1	design 2
Did your trap work?		
Did your gingerbread fit inside the trap?		

Catch a Cookie

Problem: Every time the gingerbread man comes to the river the Sly Fox tricks him and eats him.

Challenge: Build a trap to catch the gingerbread man so YOU can eat him.

Challenge details:

- your trap must be built on a flat surface.
- your trap must fit the gingerbread man.
- your trap must be able to hold the gingerbread man.
- you must demonstrate how your trap will work once it is completed.

Materials:

- paper
- yarn
- paper clips
- blocks
- cardboard boxes

Hide and Seek

Problem: Every time the gingerbread runs away everybody chases after him.

Challenge: Design a disguise for the gingerbread

man so he can stop running.

Challenge details:

- illustrate the gingerbread man so he can disguise himself of camouflage.
- write a short paragraph about how your gingerbread man is disguised.

Materials:

- gingerbread man outline
- crayons
- writing paper
- imagination

Design your bridge below. Make a detailed diagram of what you want your bridge to look like.

Design 3 with your partner

	Design 3
Number of marshmallows	
Number of toothpicks	
Length of bridge	
Did your bridge hold the weight of the gingerbread?	