

Popsicle Stick Bridge Engineering Challenge

Using exactly 50 popsicle sticks and liquid glue, can you build the strongest bridge?



Created by Smart Chick Teaching Resources

Clothespin Car Engineering Challenge

Can you make the clothespin car that travels the farthest distance when launched from a ramp?

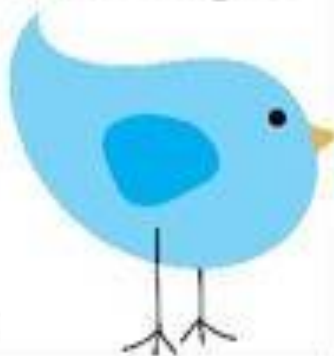


Created by Smart Chick Teaching Resources

Build a Bird Beak Engineering Challenge

Using the materials provided,
can you build a bird beak
that can pick up the most
food in one try?

Created by Smart Chick Teaching Resources



Bird Nest Engineering Challenge

Using found natural
materials, can you make a
bird nest that can hold three
eggs (marbles)?

Created by Smart Chick Teaching Resources



Paper Clip Chain Engineering Challenge

Using one box of paper clips,
can your group create a
paper clip chain that will
hold the most weight?

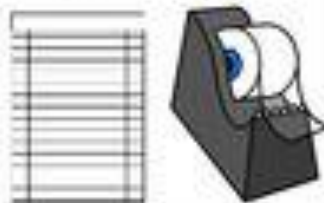
Created by Smart Chick Teaching Resources



Paper Structures Engineering Challenge

Can you build a paper structure
that can hold a text book at least
12 inches above the tabletop?

Created by Smart Chick Teaching Resources



Paper Structures

Engineering Challenge

Can you build a paper structure that can hold a text book at least 12 inches above the tabletop?

Created by Smart Chick Teaching Resources



Paper Chair

Engineering Challenge

Can you create a chair that can hold a stuffed animal using only paper and tape?

Created by Smart Chick Teaching Resources



Paper Bag Basket

Engineering Challenge

Can you create a paper bag
basket that can hold the most
weight?



Created by Smart Chick Teaching Resources

Tin Foil Tower

Engineering Challenge

What is the tallest free-
standing tower your group
can build with only one box
of aluminum foil?



Created by Smart Chick Teaching Resources

Paper Cup Engineering Challenge

Can you create a cup that can hold as much water as possible for at least 10 seconds from just one sheet of paper?

Created by Smart Chick Teaching Resources



Gingerbread Man Trap Engineering Challenge

Can you create a trap that can catch and hold one gingerbread man cookie?

Created by Smart Chick Teaching Resources



Perfect Package Engineering Challenge

Using the materials provided,
can you create the perfect
package that will protect the
delicate cargo inside?

Created by Smart Chick Teaching Resources



Egg Drop Engineering Challenge

Using found materials, can
you design an egg drop
contraption that gets your
egg safely to the ground?

Created by Smart Chick Teaching Resources



Newspaper Table Engineering Challenge

Using only newspaper and masking tape,
can you construct an 8 inch tall table
that is strong enough to hold a
textbook?



Created by: Smart Chick Teaching Resources

Aluminum Foil Boat Engineering Challenge

What is the strongest boat
you can make using one
sheet of aluminum foil?



Created by: Smart Chick Teaching Resources

Plastic Cup Tower Engineering Challenge

What is the tallest free-standing tower you can build using all of the plastic cups?



Created by: Smart Chick Teaching Resources

Marble Z Track Engineering Challenge

Using 5 paper towel rolls, can your group make the fastest marble Z track?



Created by: Smart Chick Teaching Resources

House of Cards Engineering Challenge

What is the tallest structure your group can make using one pack of playing cards?

Created by Smart Chick Teaching Resources



Puff Mobiles Engineering Challenge

Can you create a puff mobile that will travel at least 10 feet in three puffs of air?

Created by Smart Chick Teaching Resources



Peppermint Racers

Engineering Challenge



Using the materials provided, can you build the peppermint racer that travels the farthest distance down a ramp?



Created by Smart Chick Teaching Resources

Challenge Rules

- You must sketch some ideas before you begin the construction process.
- The tower must be able to hold a raw egg on top for at least 15 seconds.
- The tower may only be built using the straws and masking tape. For an added challenge, try to build the tallest tower!
- Be sure to test your tower as you build it!
- There are many different ways to complete this challenge. Be creative!