## APPLE STEM CHALLENGE SUPPLY LIST

Acrylic paint
Aluminum foil
Apples
Baggies
Bicycle tubing
Bushel baskets
Cardboard
Casters
Cat tails (dried)
Chicken wire
Clothes pins
Coffee filters
Cotton balls
Cotton swabs
Craft paper
Craft sticks
Doilies
Dryer tubing
Duct tape
Fabric
Felt
Flat marbles
Foam board
Food coloringl
Funnel
Gears
Glow stars
Glue

Golf tees
Google eyes
Headphones
Knobs
Leaves
LEGO® bricks
Magnets
Marbles
Measuring cups
Metal tubing
Needle and thread
Nuts and bolts
Paint brushes
Paper
Paper cups
Paper clips
Paper tubing
Pencil
Pinecones
Pipe cleaners
Plastic cups
Plastic spoons
Plastic wrap
Popsicle stick
Raffia
Ribbon
Rope
Rubber Bands

Scissors
Screws
Screwdriver
Shredded paper
Skewers
Sponges
Springs
Stapler
Straws
Sticks
Styrofoam balls
Tape
Tape measure
Timers
Tin can
Toilet paper rolls
Tongue depressors
Toothpicks
Toy apples
Twine
Twist ties
Washi Tape
Water
Wire
Wooden
planks
Yarn
Zip ties


## Design \& Build an Apple Basket

Your apple picking basket is broken but you need to harvest the apples right away, design and build a new basket that will hold 10 real apples!


Possible Supplies:
Wood slats, popsicle sticks, rubber bands, rope, toothpicks, cat tails, chicken wire, leaves, twigs, glue, tape,

## Design \& Build a Ladder

You forgot to bring a ladder to the apple orchard, but you must collect the apples from the top of the tree, design and build an apple picker!

## Possible Supplies:

Wood slats, popsicle sticks, rubber bands, rope, toothpicks, twigs, glue, tape,

## Design \& Build a Conveyer Belt

How will you get the baskets of apples from the tree to the farm stand? Can you build a conveyor belt to move them along?


Possible Supplies:
gears, bicycle tubing, nuts $\mathcal{\delta}$ bolts, chicken wire, cardboard tubes, twist ties, tape, glue

## Design \& Build an Apple Stand

Time to set up an apple stand! You need to build a stand that will hold the weight of 10 real apples!


Possible Supplies:
Wood slats, popsicle sticks, rubber bands, rope, toothpicks, chicken wire, screws, nuts $\&$ bolts, hammer \& nails, twigs, glue, tape, paint, brushes, gabric, decorative items

## Apple Stack Challenge

The great apple stack challenge! Can you stack 10 apples on top of each other? Come up with alternatives for using real apples! Get creative!

Possible Supplies:
Apples, toothpicks, popsicle sticks, tape, Styrofoam balls, needle $\delta$ thread, ribbon, Washi tape.

## Build an Apple Tower \& Structure

Have an adult cut an apple into small pieces. Using toothpicks, build and the tallest apple piece tower you can! Can you make it at least 1 foot or 12 inches tall?

