



THE EXPERIMENT

Time required: 90 minutes

OBJECTIVE

Design, build and test a propulsion system and prototype Food Transportation Device (FTD) that can accurately deliver its food payload to a specific target.

MATERIALS

To build the FTD, each team will need:

- 1 FTD Construction Kit
(enclosed in a large plastic bag)
 - » 2 sheets of 8 ½ X 11 cardstock
 - » 3 sheets of paper
 - » 10 rubber bands
 - » 1 plastic grocery bag
 - » 3 feet of string
 - » 4 cotton balls
 - » 1 rubber cork
 - » 4 straws
 - » 2 pipe cleaners
 - » 1 sheet of gift tissue paper
 - » 12" section of ½" PVC pipe for rolling tube
(Use one of the 3 sections provided for the launcher. Teams will need to share.)
- 4 raisins

Not included in the kit:

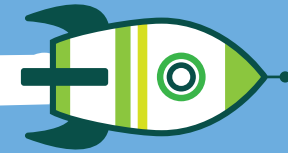
- Packing tape
- Scissors

FOR THE LAUNCH YOU WILL NEED:

- 1 rocket launcher kit
(This is built in Step #3.)
- Safety goggles for each participant

Not included in the kit:

- Hula hoops, rope or chalk to create and mark different targets
- Measuring tape
- Duct tape



TAKE THE LEAD

The facilitator will need to prepare a bag of materials for each of the five teams in advance of the activity. Use the five plastic bags provided and place 1/5 of the materials from the kit into each bag as indicated above. In each kit there are enough materials for 15 participants, assuming there will be five teams of three youths.

