Lunch Box Derby® LESSON PLAN & RULES

The Lunch Box Derby® is a program created by the DeSoto Farmers Market to familiarize fourth and fth grade students with a variety of fruits and vegetables. Students will have the opportunity to explore the shapes, textures, colors and flavors of familiar and unfamiliar fruits and vegetables. It's also a chance for students to develop teamwork skills in a creative way.



The Lunch Box Derby® is a contest with elementary school classes competing from around the region. Based on entries received by the deadline, winners will be chosen and awarded prizes, and the top four teams will have the opportunity to win a trip to the Lunch Box Derby® Finals. (Please see "Submitting the Winning Car".)

OBJECT OF THE LUNCH BOX DERBY®

The Lunch Box Derby® challenges students to design and build a race car made completely out of fresh fruits and vegetables. The car must be able to "go the distance": Stress to the class how eating fruits and vegetables will help them go the distance in living healthier lives. Teams of students compete to see which group can put together the car that travels the greatest distance. Creativity is also important:

For the national competition, cars will be judged 70 percent on distance and 30 percent on creativity.

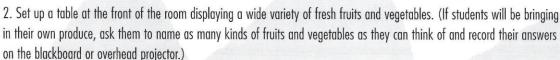
In a car's body — just like a kid's body — all the parts must work together to function effectively. Kids need to eat at least five servings of fruits and vegetables a day for good nutrition. Make sure students realize fruits and vegetables which are high in fiber and vitamins are going to make the best building materials for their racers.

Things like apples, celery, potatoes, carrots, cucumbers and bananas will hold up well. Chips, snack cakes and gooey candy won't. You may consider building a car out of junk food and letting it ooze down the ramp, explaining to students

why your car's ingredients won't allow it to move very well.

SETTING UP THE LUNCH BOX DERBY®

1. Divide students into teams of four. (Four students or less.)





3. Ask each group to nominate a chief engineer to take an inventory of potential parts — to survey what kinds of produce are available for construction.

(continued on back)



60 11112

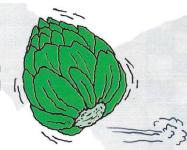
SETTING UP THE LUNCH BOX DERBY® (continued)

- 4. Ask each engineer to discuss what the choices are with his/her group members. The group should then determine which fruits and vegetables they'll need for their car for the body, the wheels, etc. The group should also determine how the produce will be sliced or carved by drawing or coloring a picture of what their vehicle should look like. A minimum of ve different kinds of fresh fruits and/or vegetables must be used. The vehicle must have at least three operational wheels and two axles. To qualify for the nals, the car must look and operate like a real car!
- 5. It's time to put it all together. Each team assembles its own car. (Teachers and parent volunteers should cut the food to the teams' speci cations, but should not help assemble the cars.) The only items that may be used in construction are:
 - fresh fruits and vegetables
- 3 bamboo skewers (any size)

4 toothpicks

• 1 rubber band (any size)

The bamboo skewers, toothpicks and rubber band may be broken or cut as needed, and the cars may be decorated with stickers. You can use a marker to add numbers to each entry. Students should be able to identify all the fruits and vegetables used to build their vehicles before the race begins, Snap a picture of each entry before racing. (They may not be in one piece after the race!)



RACING RULES

Set up a board no larger than 4 feet by 8 feet (a standard piece of plywood works nicely) to be used as the ramp.

Position the ramp at a 30 degree angle. (Anything steeper makes it difficult for the cars to stay together when they hit the floor.) For best results, set up the ramp on a tile or hardwood floor so the racers can coast as far as possible. Avoid carpeted floors if possible. (They're harder to clean!)

Call each team to the ramp one at a time. The back wheels of the car must be lined up with the top of the board and then released, allowing it to coast. Kids should not be allowed to push their cars down the ramp. Only one car at a time is allowed down the ramp.

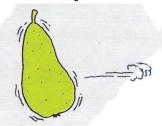
Mark the distance traveled with masking tape, then measure the distance from the top of the ramp to the front end of the main car body. If individual parts travel farther than the main body of the car, they can't be counted. Proceed to the next car.

After all teams have raced their cars, allow students to make adjustments and go for a second run. Each team's score will be the best out of two runs.

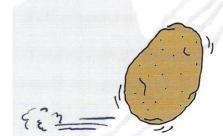
SUBMITTING THE WINNING CAR

4. When all cars have run the course twice, determine which car had the longest run. Record the distance in feet and inches. Be precise. Cars may be running neck and neck, so every quarter of an inch counts. Enter one car per classroom please. Entries will be judged 70 percent on distance and 30 percent on creativity.

Submit the following information for the competition:



- Photo and video of winning car
- Distance car traveled (in feet and inches)
- Description of car and how it was assembled
- 4. Name, address, telephone number of school
- 5. Teacher's name and e-mail address
- 6. Names and ages of children on winning team





Send the information to:

www.lunchboxderby.org

The Lunch Box Derby® is sponsored by:





get**healthy** DeSoto

by April 1, 2025