

BEST 2016 Bet The Farm Rules Test

1. Points may be gained by:

- adjusting the sprinkler heads
- corral and secure loose cows and feed them
- corral and secure loose pigs and feed them
- harvesting and delivering hydroponic cucumbers
- harvesting and delivering hydroponic lettuce
- harvesting and delivering hydroponic tomatoes
- harvesting and delivering ripe corn
- harvesting and delivering ripe onions
- move the ducks to the pond
- planting corn seeds
- planting onion seeds
- turning off the water valve
- turning on the water valve

2. The starting box is:

- also a pen for animals
- closed at the beginning of the round
- held closed by a magnetic latch
- held closed by the friction of the floor
- must be closed at the end of the round
- open at the beginning of the round

3. Seeds can be:

- loaded on the robot directly by the spotter
- loaded through the grain silo
- picked up by the robot
- placed in any bin on the field to score reduced points
- placed in the seed planting troughs to score maximum points
- placed on the field by the driver
- placed on the field by the spotter

4. The corn/cucumber scoring bin

- contains a community bin
- contains multiple bins
- is in the middle of the field
- is on the edge of the field

5. Sprinkler heads:

- are primarily ornamental
- may be used to help in harvesting
- may get tangled with the robot
- will gain points if adjusted properly

6. Produce stands:

- can receive any vegetable for points
- can receive only cucumbers and lettuce for points
- can receive only tomatoes and cucumbers for points
- can receive only tomatoes and lettuce for points
- are used by any team
- are used only by the assigned team

7. The water valves must be:

- turned off to score
- turned on and off to score max points
- turned on to score max points
- turned over or under to score reduced points

8. Pigs/Cows must be:

- fed any vegetable to score
- fed corn to score
- fed corn to score bonus points
- in the starting box with the gate closed to score
- in the starting box with the gate open or closed to score
- in the starting box with the gate open to score
- watered to score

9. Game Piece Descriptions (match)

<u>D</u>	Corn	a.	baseballs
<u>B</u>	Corn seeds	b.	golf balls
<u>K</u>	Cows	c.	loofas
<u>K</u>	Cucumbers	d.	paint rollers
<u>K</u>	Ducks	e.	pool noodles
<u>C</u>	Lettuce	f.	rubber cows
<u>K</u>	Onions	g.	rubber ducks
<u>K</u>	Onion seeds	h.	rubber pigs
<u>H</u>	Pigs	i.	tennis balls
<u>J</u>	Tomatoes	j.	whiffle balls
		k.	not used

10. Stealing game pieces from other teams is allowed. (circle one) True

False

Generic Rules

11. Materials for the robot may come from:

- team custom parts
- team supplied optional parts on the consumable kit list
- the competition kit
- the consumable kit
- the returnable kit
- welded items from a metal shop

12. Returnable Kit equipment that can be modified include:

- nothing can be modified
- servo horns
- the belt loop
- the belt stock
- the joystick

13. Usable motor ports allowed in BEST are: (circle all valid BEST ports)

0 1 (2) (3) (4) (5) (6) (7) (8) (9) 10 11 12

14. On game day, team supplied batteries may be used:

- in the joystick
- on the robot for custom functional devices
- on the robot for non-functional devices
- on the robot to increase electrical power

15. Lubricants may:

- not be used
- used for lubrication
- used to contaminate the field
- used to impede another team's robot

16. Solder may be used to solder wires to:

- bullet connectors
- quick-disconnect connectors
- the batteries
- the motor power lugs
- the servos
- the VEX Cortex microcontroller

17. Painters tape may:

- not be used
- used on any of the consumable kit
- used on any of the returnable kit
- used on any of the returnable kit except the joystick

18. Team Custom Parts are:

- a. not allowed
- b. one is allowed
- c. two are allowed
- d. four are allowed

19. The robot must be:

- a. no more than 20" x 20" x 20" at the beginning and end of the round
- b. no more than 20" x 20" x 20" at the beginning of the round
- c. no more than 24" x 24" x 24" at the beginning and end of the round
- d. no more than 24" x 24" x 24" at the beginning of the round

20. The weight of the robot must be:

- a. no more than 20 pounds
- b. no more than 24 pounds
- c. at least 20 pounds
- d. at least 24 pounds

21. Energy for the robot may only come from:

- electrical energy from 1 supplied battery
- electrical energy from extra supplied battery
- electrical energy from team supplied 9 volt battery
- storage achieved by the deformation of springs
- change in the altitude of the center of gravity of any part of the machine
- stretched items (rubber bands/shock cord/etc.)

22. The robot must prominently display:

- a. team number only
- b. team number, name, and logo
- c. team number and team name or logo
- d. team number and name
- e. team number and logo