**Agricultural Safety Education Initiative**

**Tabletop Hitching and Backing Up of Tractor and Machinery– Facilitator Copy**

**Introduction**: This exercise is to help your participants understand how to correctly and safety back up tractors for hitching and moving machinery. Using the materials listed, complete the activity with your students and discuss the results afterwards.

**Objective**: Help students determine the direction of movement to take when backing tractors and hitching equipment.

**Materials Needed**: 1/16 or 1/32 scale model tractor, 1/16 or 1/32 scale model towed equipment (i.e. baler or trailer), tape measure, calculator, course markers (i.e. buttons, washers, bolts or similar items), and smooth level tabletop surface.

1. Briefly explain the activity to the participants- give them directions on how to use the materials and how they are going to complete the activity on the worksheet.
2. Allow them 15-20 minutes to finish the activities on the worksheet.
3. Using 5 minutes or less, discuss the results of the participants and what they can interpret from this exercise.

Discussion Questions to Consider:

* What kind of precautionary measures *should* you take when dealing with hitching and backing up tractors and machinery?
* What kind of clothing/dress is appropriate while working with equipment?
* Where should you stand when assisting an operator when backing up?

**Tabletop Hitching and Backing of Tractor - Student Copy**

**Introduction**: This exercise is to help you understand how quickly loose clothing can become entangled in equipment while working. Using the materials, follow the steps below to complete the skill activity.

**Materials**: 1/16 or 1/32 scale model tractor, 1/16 or 1/32 scale model towed equipment (i.e. baler or trailer), tape measure, calculator, course markers, and smooth level tabletop surface.

**Activity:**

**Step 1: Draw an arrow to represent the correct circular direction to turn the steering wheel to match the towed equipment’s travel direction in each picture below.**

**Step 2: Step up the tabletop course using the NSTMOP tractor driving course handout.**

* Use buttons to represent barriers of the tractor course.

**Step 3: Connect the model tractor and towed equipment.**

**Step 4: Using the model tractor and towed equipment, demonstrate the principles of steering discussed in Step 1 of this activity sheet.**

**Step 5: Perform the tabletop driving course using the model tractor and towed equipment.**

* Have a peer judge your performance using the driving rubric.

*Discuss this activity with your instructor and identify ways to keep yourself safe around tractors and machinery.*