

STANDARD TASK ANALYSIS FORM

6/2/2011

Duty/Task:								
G-2 Plant seeds in field								
STEPS (Required to Perform the Task)	PERFORMANCE STANDARDS (Observable & Measurable Criteria)	TOOLS, EQUIPMENT, SUPPLIES & MATERIALS (Needed)	REQUIRED KNOWLEDGE AND SKILLS (Math, Science, & Language)	SAFETY (Concerns)	WORKER BEHAVIORS (Important to Worker Success)	DECISIONS (Identify Decisions that Must be Made by the Worker)	CUES (Identify the Data Needed for Making Correct Decisions)	ERRORS (Indicate What May Result if Incorrect Decisions are Made)
MECHANICALLY:								
1 Obtain seeds for the variety you want to grow	1 Obtained the correct seed variety for planting	1 Purchase order, phone	1 Knowledge of seed varieties	1 N/A	1 Discerning, selective, accurate, decisive, timely	1 What varieties should I plant? What do consumers want? What is a reasonable price to pay? How much should I purchase? Am I growing organic?	1 Consumer demand, growing conditions, budget, what's available, organic vs. non-organic approach	1 Won't be able to grow the crop we want, variety may not be adaptable to our environment
2 Adjust planting depth on planter	2 Adjusted the planter to the correct depth for the seed being planted	2 Planter, wrenches, ruler	2 Knowledge of recommended planting depths, mechanical knowledge	2 Use caution around equipment	2 Accurate, conscientious, problem solver	2 How deep should I set the planting depth? How do I adjust the planting depth? What tools do I need to adjust the planting depth?	2 Seed variety, owner's manual for planter	2 Seeds planted too deep won't germinate, seeds planted too shallow will dry out and die
3 Adjust seeding rate on planter	3 Adjusted the seeding rate to apply the correct rate of seeds per inch/acre	3 Planter, wrenches, planting diagram (with planter)	3 Knowledge of recommended seeding rates, mechanical knowledge, knowledge of varietal growing requirements	3 Use caution around equipment	3 Accurate, conscientious, problem solver	3 What is the recommended seeding rate per acre? How do I adjust the planter to the recommended seeding rate? What tools do I need to adjust the seeding rate?	3 Seed variety, owner's manual for planter	3 Seedlings may be overcrowded or may be too sparse for optimum production
4 Adjust row width on planter	4 Adjusted the row width to the proper width for the variety being planted	4 Planter, wrenches, ruler	4 Knowledge of recommended planting row width, knowledge of cultivator width, mechanical knowledge	4 Use caution around equipment	4 Accurate, conscientious, problem solver	4 How wide should my row width be? How do I adjust the row width on the planter? What tools do I need to adjust the row width?	4 Seed variety, owner's manual for planter	4 Row width will not match cultivator width, too close may overcrowd plants, too far apart will not optimize production capability
5 Place seed and starter fertilizer (if non-organic) in separate planter hoppers	5 Added seed and fertilizer (if used) and adjusted fertilizer rate	5 Seed, fertilizer, planter	5 Knowledge of fertilizer rate for starting crop	5 Use proper lifting techniques	5 Accurate, conscientious, problem solver	5 Which hopper is for fertilizer and which is for seeds? How do I adjust the fertilizer rate on the planter? What tools do I need?	5 Owner's manual for planter	5 Won't be able to grow the crop we want, yield may be affected if not enough fertilizer is applied, over fertilization may lead to crop injury
6 Plant the seeds	6 Planted the seeds	6 Planter, tractor	6 Mechanical knowledge, ability to safely operate a tractor	6 Operate tractor safely	6 safety conscious, persistent, accurate	6 How fast should I drive while planting? How do I know how much to overlap my passes?	6 Planting marker, type of planter and tractor	6 Won't have a crop if not planted correctly, yield may be affected, may damage the equipment
7 Water (if needed and if possible)	7 Added sufficient water if available and if needed	7 Irrigation system	7 Mechanical knowledge, knowledge of how to operate irrigation system	7 Use caution around pumps and high pressure pipelines	7 Accurate, conscientious, problem solver, timely	7 Should I add water or wait for rain? How much should I add? How do I apply the water?	7 Weather conditions, soil conditions, type of irrigation system (if available)	7 New seed won't germinate without adequate soil moisture
MANUALLY:								
8 Obtain seeds for the variety you want to grow	8 Obtained the correct seed variety for planting	8 Purchase order, phone	8 Knowledge of seed varieties	8 N/A	8 Discerning, selective, accurate, decisive, timely	8 What varieties should I plant? What do consumers want? What is a reasonable price to pay? How much should I purchase? Am I growing organic?	8 Consumer demand, growing conditions, budget, what's available, organic vs. non-organic approach	8 Won't be able to grow the crop we want, variety may not be adaptable to our environment
9 Create a furrow in which to plant the seeds	9 Created a furrow of the proper width and depth	9 Hoe, hand cultivator	9 Physical stamina	9 N/A	9 Physically fit, conscientious, accurate	9 How will I create a furrow? How wide should it be? How deep should it be?	9 Size of seed being planted, available tools	9 Won't have a proper seed bed conducive to germination
10 Place seeds in furrow	10 Placed seeds at the proper spacing and density	10 Manual push seeder or hand	10 Knowledge of varietal planting requirements	10 N/A	10 Physically fit, conscientious, accurate	10 What should my seeding rate be? How do I adjust the manual push seeder?	10 Planting guide, owner's manual for push seeder	10 May produce too many or too few seedlings per acre if not planted at the correct rate
11 Apply starter fertilizer (if non-organic)	11 Applied high phosphorus (starter) fertilizer at the proper rate	11 Hand, bucket	11 Knowledge of fertilizer analysis and rates for in-row application	11 Use gloves to protect hands	11 Physically fit, conscientious, accurate	11 What analysis of fertilizer should I use? How do I apply it? How much should I apply?	11 Planting guides, soil tests, available equipment or tools	11 Yield may be affected if not enough fertilizer is applied, over fertilization may lead to crop injury
12 Cover the seeds and fertile	12 Covered the seed and fertilizer to the correct depth	12 Hoe, foot	12 Knowledge of varietal planting requirements	12 N/A	12 Conscientious, physically fit	12 How much soil should I cover the seed with?	12 Varietal requirements	12 Seeds may dry out or may not germinate
13 Water (if needed and if possible)	13 Added the correct amount of water if available and if soil conditions warranted	13 Irrigation system	13 Mechanical knowledge, knowledge of how to operate irrigation system	13 Use caution around pumps and high pressure pipelines	13 Accurate, conscientious, problem solver, timely	13 Should I add water or wait for rain? How much should I add? How do I apply the water?	13 Weather conditions, soil conditions, type of irrigation system (if available)	13 New seeds won't germinate without adequate soil moisture
Analyst: John Moser			Specific Relevant References:					
Expert Workers:			1 Owner's manual for planter					
Al Welch			2 Extension publications					
Milan Pajev			3 Dealer marketing materials					