

## Wheel of MISfortune

### Needed Materials:

Lazy Susan with marked sections or “spinner” from a game (like Twister)

Reaction Timer

Display Board (as shown on second page)

Have participants spin the wheel. The wheel will stop on one of six numbers representing six different farm incident situations. Point to the corresponding situation on the display board. Look at the data sheet below the picture with the information about the speed at which something could occur. Then ask your bystander to step over to the reaction timer and measure their reaction time.

The reaction timer has two switches for operation. Set the switch to the HUNDRETHS (not seconds). This will show the 0.00 seconds on the display. The switch on the left changes the indicator from light to sound. Generally, the sound is used as the indicator, however, if someone has poor hearing or the room is noisy, use the light setting. Experiment with this before you begin.

Position the large pressure button on a table so that the participant can easily tap the button in response to the reactor. Instruct participants to rest with their hands at their sides.

Once you have instructed the participant on how to respond, distract the participant with a question or two before starting the reaction timer. Start the reaction timer by squeezing the small pressure button while making certain that participant does not see your actions. By your distraction, the reaction time that you measure is closer to a normal time.

Explain the results of the danger based on their reaction time using the graph under the danger. For example, if the reaction time of the participant is .50 hundredths of a second for the PTO shaft, then approximately, 6.5 feet of their arm or leg would have been pulled into and around the PTO shaft in the amount of time it took them to react to the PTO danger. Special note: The lawn mower does not pull in, but cuts instead. This one danger uses the number of times the blade will cut what is in its way.

You need to point out the safe way or correct procedure to the participant, in order to avoid the harmful situation. Safety considerations are listed on the graph for each danger. Remember humans cannot react fast enough to avoid danger, therefore, humans need to avoid placing themselves in dangerous situations. The myth that a person can react fast enough is just that, a myth!

### Additional operational tips:

When there is no activity around the display, turn off the reaction timer and display lights.



## Wheel of MISfortune-cont.

Facts and safety precautions. Include with photos of corresponding equipment. Copy on colors to match wheel.

### Rotary lawn Mower, Tip 300 ft/s or 52 cuts per second

- Keep hands and feet away from blade area.
- Disengage power, turn off engine, wait for blade to stop before doing any maintenance in blade area.
- Look behind you before backing up.
- Keep all shields in place.

<b>Feet Per Second</b>	<b>cuts per second</b>
60 ft in .20 seconds	10 cuts
90 ft in .30 seconds	15 cuts
120 ft in .40 seconds	20 cuts
150 ft in .50 seconds	26 cuts
180 ft in .60 seconds	32 cuts

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### Belts and Pulleys travel at 66.7 ft/s

- Keep all shields in place
- Disengage power and turn off engine before doing any maintenance.

<b>Feet Per Second</b>
13.3 ft in .20 seconds
20.0 ft in .30 seconds
26.6 ft in .40 seconds
33.3 ft in .50 seconds
40.0 ft in .60 seconds

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### Auger Entanglement-A 6 inch auger at 400 Rpm, entangles at 10.5 ft/s

- Stay clear of all moving parts
- Keep all shields in place.

<b>Feet Per Second</b>
2.1 ft in .20 seconds
3.1 ft in .30 seconds
4.2 ft in .40 seconds
5.2 ft in .50 seconds
6.3 ft in .60 seconds

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## Wheel of MISfortune-cont.

Facts and safety precautions. Include with photos of corresponding equipment. Copy on colors to match wheel.

### PTO Shaft

- Keep all shields in place.
- Clothing should be free of loose ends that might entangle.
- Stay clear of moving parts.

### Feet Per Second

2.6 ft in .20 seconds	1.1 ft in .20 seconds
3.9 ft in .30 seconds	2.1 ft in .30 seconds
5.2 ft in .40 seconds	2.8 ft in .40 seconds
6.5 ft in .50 seconds	3.5 ft in .50 seconds
7.9 ft in .60 seconds	4.2 ft in .60 seconds
At 1000 Rpm pulls in 13.1 ft/s	540 Rpm pulls in 7.07 ft/s

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### Stalk Rolls On Corn Head pull in at 12 ft/s

- Disengage power and turn off engine before attempting to unplug.

### Feet Per Second

2.4 ft in .20 seconds
3.6 ft in .30 seconds
4.8 ft in .40 seconds
6.9 ft in .50 seconds
7.2 ft in .60 seconds

3

### Distance Equipment fall during reaction time

- Mechanically lock and blockup equipment

### Feet Per Second

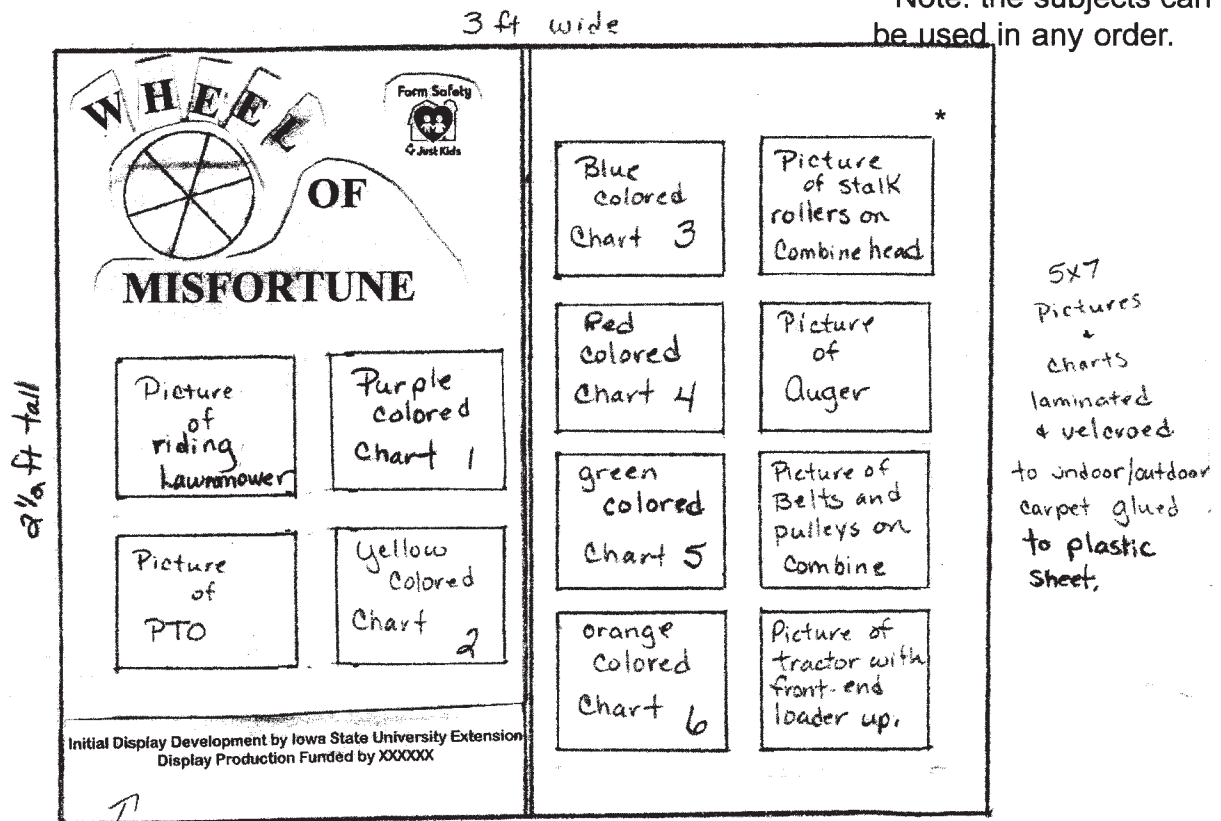
0.6 ft in .20 seconds
1.4 ft in .30 seconds
2.6 ft in .40 seconds
4.0 ft in .50 seconds
5.8 ft in .60 seconds

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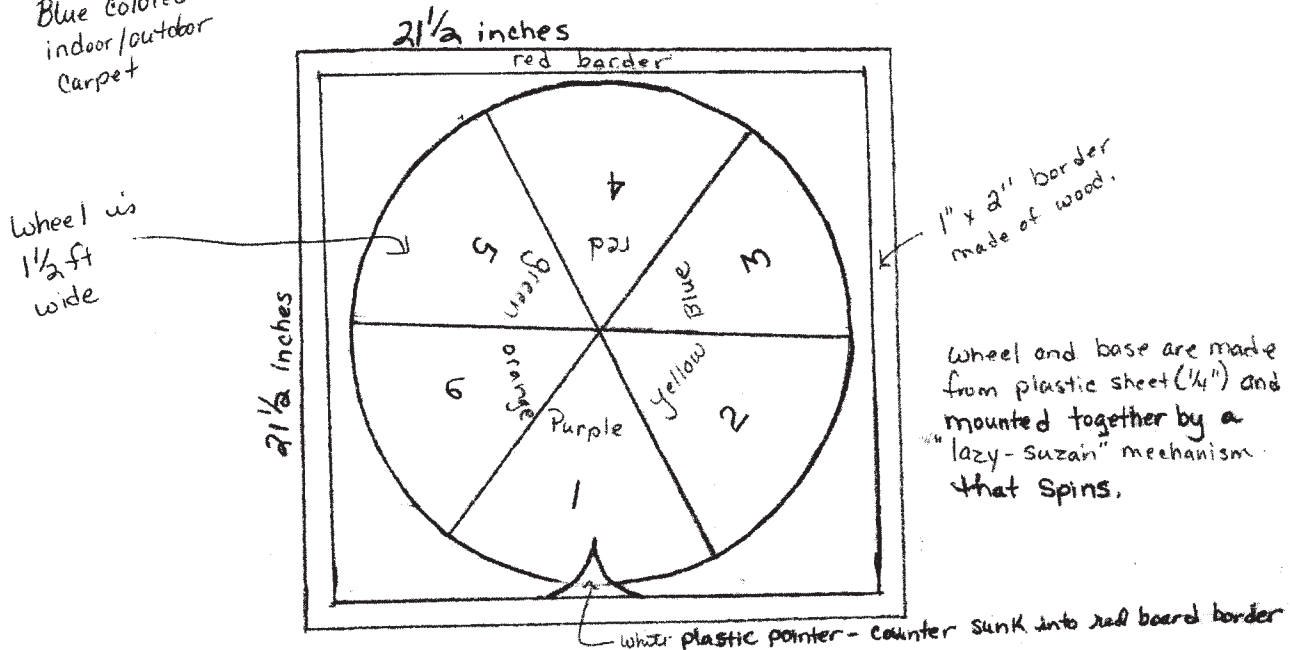
# Wheel of MISfortune-cont.

\* Note: the subjects can be used in any order.



Blue colored indoor/outdoor Carpet

metal hinge riveted to 1/4" plastic sheet



Wheel and base are made from plastic sheet (1/4") and mounted together by a "lazy-suzan" mechanism that spins.