

## Pre Knowledge Survey

1. Which of the following is not an element needed for a grain dust explosion:
  - a. Oxygen
  - b. Saturation
  - c. Ignition Source
  - d. Dispersion
  - e. Confinement
2. T/F Pressures from an explosion with corn dust can be greater than 100 psig.
3. Good housekeeping includes:
  - a. Vacuuming with proper equipment
  - b. Paying attention to "hidden areas"
  - c. Training all employees
  - d. Maintaining dust aspiration systems
  - e. All of the above
4. T/F Deflagration isolation is an option for dust explosion protection.
5. Which of the following are ways to reduce grain dust during unloading:
  - a. Use cyclones, fabric filters, baffles, and deadboxes
  - b. There is no good way to reduce dust during unloading
  - c. A closed receiving area so the wind can't disturb the dust
  - d. Unload the grain slowly
6. T/F The recommended minimum spout slope for free flowing ingredients is 30 degrees.
7. Safety precautions for bucket elevators include:
  - a. Locating the bucket elevator inside the main structure
  - b. Dust tight with no venting to prohibit escape of dust
  - c. Belt speed, alignment and bearing temperature sensors
  - d. Explosion venting secured tightly to the leg
8. Suppression systems have to be inspected at minimum every:
  - a. Month
  - b. 2 months
  - c. 3 months
  - d. 12 months
9. T/F Chemical isolation systems do not trigger with pressure.
10. Explosion Suppression systems can suppress an explosion within:
  - a. 20 milliseconds
  - b. 40 milliseconds
  - c. 80 milliseconds
  - d. 120 milliseconds