



# “Use Your Gourd” Pumpkin Drop

- Part of Carroll District STEM Activities 2023
- November 5<sup>th</sup> at 1 pm
- Arrive a bit early to check in your pumpkins
- Sykesville Fire Station – 6680 Sykesville Rd.
- Cub Scouts • Scouts BSA • Venturers
- Units can do multiple pumpkins (one from each pack, den, patrol, scout, whatever works)
- Teamwork is encouraged
- No fee for participation but you have to provide your own pumpkins and materials
- Free registration is required

Get your unit thinking about STEM in a fun way! Have them work together as a team to come up with a way to protect a pumpkin from damage from a very high fall. This is much like the egg drop events you’ve probably seen in the past, except much larger! And remember, the bigger they are...

Full rules are on the next page. Questions can be sent to [chris@kriegers.org](mailto:chris@kriegers.org).

## RULES

- Drop heights are typically (but not guaranteed to be) 30', 60' and 80'
- If your pumpkin and device survive the first drop, they will advance to the next round
- Pumpkin must be at least 10 inches in diameter or larger and must be orange in color.
- Pumpkin and protective structure weight is limited to 40 pounds.
- Pumpkins cannot be painted or coated with any material (paint, stain, sealant, acrylic)
- The inside of the pumpkin may not be altered (no freezing, hollowing or adding chemicals).
- No styrofoam packing peanuts (real peanuts or other biodegradable materials are OK)
- Pumpkin enclosure must free fall (no bungee cords or ropes).
- Pumpkins will be dropped by a fire fighter, all participants and spectators can watch near the drop zone but cannot drop the pumpkin
- No hard materials (which include but are not limited to wood, metal, PVC pipe, or glass) is allowed; however, soft garbage cans are acceptable.
- No liquids are allowed (this includes oils)
- No electrical sources are allowed. No rocket engines are allowed.
- Package must be designed so that the pumpkin can be removed, checked, and reloaded for another drop
- Protective structure around the pumpkin must be designed so that it does not cause any damage to property or people
- Any entries that employ a parachute must be designed so that the parachute is dropped at the same time as the pumpkin, not prior or after.
- Please keep the safety of participants & observers in mind at all times.
- The judges will have final say on whether entries are viewed as safe to be dropped. Judges will disqualify entries with heavy, sharp, or protruding parts. These decisions are final.
- Judges will determine if the pumpkin "survived" the fall. This is done using the "Daylight Rule." If light can go from the outside of the pumpkin to the inside, the pumpkin is broken. If there are cracks, but none let in light, then you can continue.
- Judges will also rate the innovation in the design. Decisions are final.
- Materials will not be returned. All items must be disposed of. Take your trash.