

Purpose: To practically apply teachings about ladder safety with a fun, memorable game.

Time: 1-3 minutes per person

Materials:

Plinko Board and chips*

- Build a Plinko board: there are lots of tutorials out there!
 - We used: <https://learn.kregtool.com/plans/plinko-game-board/>
 - Smaller version: <https://diy.dunnlumber.com/projects/how-to-make-a-diy-plinko-game-board>
- Buy a Plinko board
 - https://www.amazon.com/WinSpin-Prize-Board-Playing-Carnival/dp/B077SZFXVR/ref=sxin_14_ac_d_by
 - https://www.amazon.com/GoSports-DROPSTER-Prize-Customizable-Slots/dp/B081W4NZKG/ref=sr_1_31

Directions:

Provide information on ladder safety (banners, posters, handouts, etc).

- How to choose the right ladder for the job they need to do – consider:
 - Type of ladder (step ladder or extension ladder at a minimum, can include others) and when to use each:
 - if accessing another level, you must use extension ladder
 - a step ladder is best for longer jobs
 - Ladder height – ladder should get you within 4’ of work area
 - special considerations for extension ladder length (section overlap, must extend 3’ past support point if you are stepping off ladder onto another level, a ladder can be too long)
 - Ladder composition – what the ladder is made of, pros/cons of different materials
 - Appropriate footings – make sure ladder is “non-slip” by using footings appropriate for job site (non-slip “shoes”, spurs, spikes, etc)
 - Weight limit – all ladders have a maximum load capacity, don’t exceed it!
- Guidelines for setting up each type of ladder
 - Check for overhead hazards – especially be aware of electric lines
 - Position the ladder correctly
 - Extension ladder: should lean at about 75° or “1 out for every 4 up”
 - Step ladder: need to have all four feet on a level surface so step ladder is stable
 - Ensure all locking devices are engaged
 - If accessing another level, ladder should extend 3’ above that surface
- Using the ladder
 - Maintain three points of contact when climbing
 - Don’t go above last usable step (4th rung from top on extension ladder, 2nd step from top of step ladder)
 - Do not lean too far to side while working (“keep belt buckle between the rails”)

* This game could also be played using dice or a spinning prize wheel – whatever you have/can easily get

Develop questions/scenarios

- A different scenario goes with each slot (designate with number, letter, color, etc)
- Create scenarios that would reflect common tasks on a farm that require using a ladder. Our scenarios:
 - *You need to replace light bulbs in the pole barn. The fixtures are mounted 15' high on each pole.*
 - *You need to get on the roof to replace a few shingles that came loose in the last storm. The edge of the roof is 23' high.*
 - *You want to install a weather monitoring station on the roof of the shop. The roof is 17' high and an electric line is nearby.*
 - *It is time to install the sprinklers in the hoophouse. The pipes should run about 12' high down the center of the hoophouse. (you may need to explain what a hoophouse is*
 - *Billy Bob painted his barn John Deere green as a surprise for Charlene. He asks you add yellow trim along the roof - the peak of the barn is 32' high.*
 - *It's time to clean out the hay loft in the old barn. The hatch to enter is 10' above an uneven floor.*

Game Play

- Give people time to look at the displayed information before inviting them to play.
- Each person who plays drops a plinko chip into the board – note which slot it lands in.
- Read the appropriate scenario.
- Ask: “Which ladder would you choose to do this job?” (You can leave it open ended or give choices. For younger audiences, you might ask only one aspect – e.g., “Should you use a step ladder or extension ladder?”)
 - If they got it right, give them a prize.
 - If they got it wrong, explain what the right answer would be and why.

Tips for engaging your audience

- Most of the time, people will see the game and choose to play without much effort (having prizes helps)
- If someone approaches but doesn't engage, you can ask a question like:
 - Have you ever fallen off a ladder?
 - Do you know anyone who has fallen off a ladder?
 - What do you know about ladder safety?
 - Do you want to play?

Find our ladder safety resources at www.gpcch.org.