

## Hey Engineers- Can you design a trap to catch a Leprechaun???



Leprechauns are very smart and very tricky! To catch one, you will need to make a very clever trap- one that has at least 1 simple machine as part of the construction. Use recycled items or things around the house. You do not need to buy materials to create it. The trap should include some type of "bait" to get the leprechaun's attention and be "triggered" by movement into the trap. Along with your project you will need to turn in your "Leprechaun Trap Engineer Design Plan".

We will be setting our traps on March 16th. Have fun, use your imagination to design an original trap. I can't wait to see the amazing ideas you come up with! ♥ -Dr. Laabs

### Leprechaun Facts:

- Leprechauns are only about 4 inches tall.
- They like to play tricks on people.
- Leprechauns are attracted to the color green and love shiny things!
- They collect coins and hide them.
- They wear little green suits and hats.
- If caught, a leprechaun must share his gold with you or grant you three wishes!

### Simple Machines



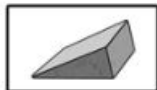
Wedge



Wheel and Axle



Lever



Inclined Plane



Screw



Pulley



Entries will be judged on **CREATIVITY** (*design and materials*), **EXPLANATION** (*how it works*), use of **SIMPLE MACHINES**, and **ENGINEER DOCUMENTATION** (*process/plan, how hard you worked*).

All entries will earn a prize! ENGINEER OF THE MONTH will be awarded to the winners!

**\*\*\*Bring your creation into school on or before MARCH 16!**

Engineer: \_\_\_\_\_

Grade: \_\_\_\_\_

# Leprechaun Trap Engineer Design Plan

*Attach pictures, design drawing, reflection notes, etc, to show your process and how hard you worked!*

**Describe how your Leprechaun Trap works.** *Include how it attracts the leprechaun, and how it is triggered.*

**List the steps you used to design your leprechaun trap.** *Research, Design Plan, Using new tools, Test & Evaluate, Improve*

**Did you run into any problems building your trap? Yes No**

**How did you solve them?**

**What are the measurements of your trap?**

How wide is it? \_\_\_\_\_ How tall is it? \_\_\_\_\_ How heavy is it? \_\_\_\_\_

**Circle the Simple Machines that you used.**



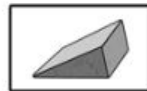
Wedge



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Inclined Plane



Screw



Pulley

**Circle the shapes that you used.**



2D



circle



square



rectangle



oval



triangle



trapezoid



3D



sphere



cube



rectangular prism



cone



cylinder