Design a Trampoline

Design a trampoline that will lift an object (golf ball) that weighs three ounces to a height of two feet.

What You’ll Need

• 1 colander
• 20 rubber bands
• 20 toothpicks
• 6 binder clips
• 1 piece of cloth the size of the opening of the colander
• 1 golf ball

Reflection Questions:

Explain how your trampoline lifts the object.

What changes would you need to make if your object weighed five ounces?

Redesign Challenge:

Make changes to your trampoline design so that the object will lift to a height of four feet.

Overall Design Reflection Questions:

• What were some interesting discoveries you made while working on the Design Challenges?
  • About the problems? About yourself?
  • What were some of the difficulties of the Design Challenges?
    • What made them difficult?
  • What were some learning moments?
    • What made them so?
  • How can you use what you have learned in the future?

For more on design and flight, check out – To Our Solar System and Back Digital Exploration on TGR EDU: Explore tgreduexplore.org/curriculum

“I’ve always had that knack for staying pretty even keel and the more the situation gets tense the more I see things clearly and I think that’s just a knack that I’ve always had.”

– Tiger Woods

©TGR Foundation 2020