

Thank you for taking an interest in my product

In this sample you'll find a portion of the PBL you're interested in.

What you won't find is the:

- complete instruction set
- the answer key
- important things to look for in student responses
- teacher tips and tricks

If you have any questions, please send me an email – devon@teachwithfergy.com



<https://www.teacherspayteachers.com/Store/Teach-With-Fergy>

Name: _____

Date: _____

Friction Safety

Learning Goals (SWBAT):

- **Develop a prototype that can realistically be used to solve a real world problem**
- **Design a set of experimental procedures to determine the coefficient of friction between two surfaces**

Prerequisites:

- **Newton's Laws (mostly Newton's Second Law)**

Problem: You work for a materials testing company that offers other companies ways to make sure that their products are safe and are made to a high degree of quality. A new customer has come to you to see if you can design a solution to a unique problem she is having; she owns a company that makes flooring materials such as ceramic tiles and hardwood floors. **THIS SECTION OF TEXT HAS BEEN REMOVED FROM THIS PREVIEW**

Materials:

THIS SECTION OF TEXT HAS BEEN REMOVED FROM THIS PREVIEW

- Textbooks
- Ramps
- Meter sticks
- Protractors

THIS SECTION OF TEXT HAS BEEN REMOVED FROM THIS PREVIEW

Task: You and your engineering team must design a prototype for **THIS SECTION OF TEXT HAS BEEN REMOVED FROM THIS PREVIEW**

You must provide the customer with the following:

- 1) Background theory (proof you know what you're talking about) - what equations do you use?

THIS SECTION OF TEXT HAS BEEN REMOVED FROM THIS PREVIEW

- 2) A blueprint of your

THIS SECTION OF TEXT HAS BEEN REMOVED FROM THIS PREVIEW

- 3) **THIS SECTION OF TEXT HAS BEEN REMOVED FROM THIS PREVIEW**

- 4) Full calculations from start to finish with all steps shown.

- 5) **THIS SECTION OF TEXT HAS BEEN REMOVED FROM THIS PREVIEW**