

Tuesday, September 25, 2012

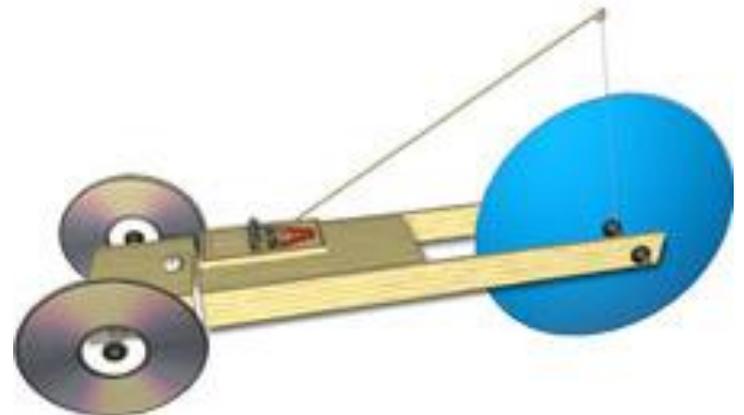
Agenda

- Warm Up (10 min)
- Reminders (1 min)
- Construction Hints (12 min)
- Research/ Design (25 min)
- Daily Log 3/ Clean Up (5 min)

Warm Up:

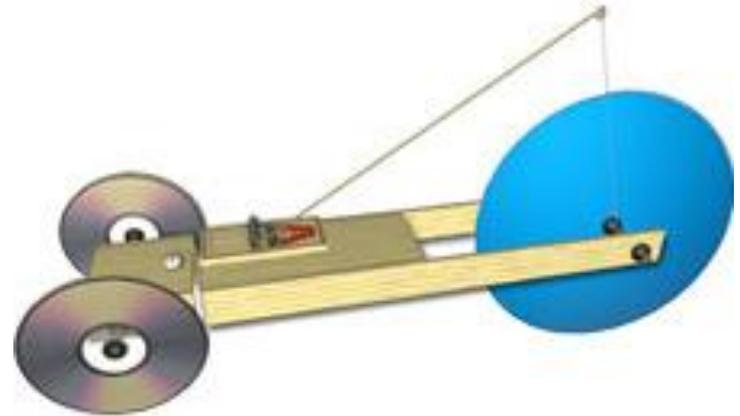
Define “torque.”

Where is torque used in a mousetrap car?



WARM UP ANSWERS

Torque – the force required to rotate an object

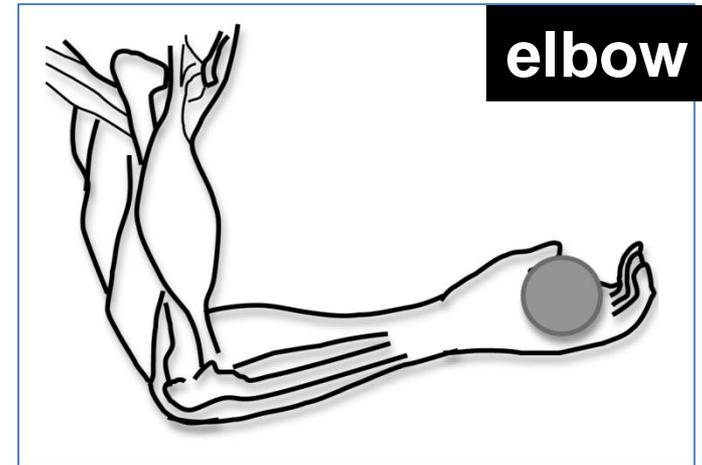


In a mouse trap car, the spring uses torque to rotate the drive axle.

Examples of TORQUE



Merry go round



elbow



Bicycle crank

REMINDERS

Daily logs!!

Daily points!!

Parent conferences: Thursday, Sept 27, 5 pm

FRIDAY, SEPT 28

- ◆ Research (20 points)

- ◆ In your notebook
- ◆ Definitions
- ◆ Websites
- ◆ questions

- ◆ Design (20 points)

- ◆ In your notebook
- ◆ 3 views
- ◆ Materials list

Let's go!!

TODAY:

- Decide which materials you are bringing
- Continue your research
- Continue your design
- Ask for help

MR NESBITT HAS:

White glue, glue guns w/ sticks,
mousetraps, string, binder clips

Research

In your notebook, put the following information:

Define these words:

1. Potential Energy
2. Kinetic Energy
3. Force
4. Friction
5. Torque
6. Power
7. Axle
8. Chassis
9. Lever

List 4 websites that have information about building a mousetrap car

- 1.
- 2.
- 3.
- 4.

Research

Answering the following questions

1. Describe how a mousetrap car works and explain the different parts of the car (mousetrap, chassis, wheels, axle, lever arm, and string) (**two paragraphs**).
2. Describe where the energy comes from and how it makes the car move (**one paragraph**).
3. Describe the materials you plan on using and the different features of your design (wheel size, chassis size, lever arm size, string type, wheel type, axle size) (**one paragraph**)

Design

In your notebook, make a drawing of your mousetrap car design.

Include a TOP VIEW

Include a BOTTOM VIEW

Include a SIDE VIEW

Label all of the parts of your car (wheels, axle, lever arm, string, mousetrap, etc.)

Include the measurements of your car (wheel size, axle length, length and width of chassis, length of lever arm, etc.)

Include a list of MATERIALS that you plan on using for your car and what you will use them for.

**use a ruler. It must be neat and presentable. **