

The words "DO NOW" are written in a large, stylized, 3D font with a glowing yellow and orange gradient, set against a black rectangular background.

DO
NOW

- Record your HW in your agenda
- Update your table of contents:

Page #	Title	Date
150	Hasina's Force Folly	04/09
151	Friction Notes	04/09

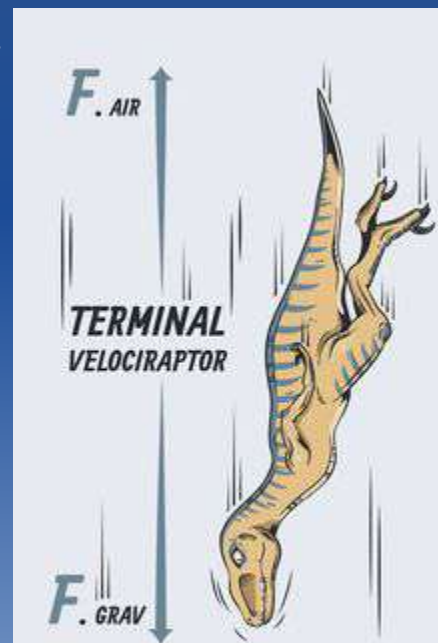
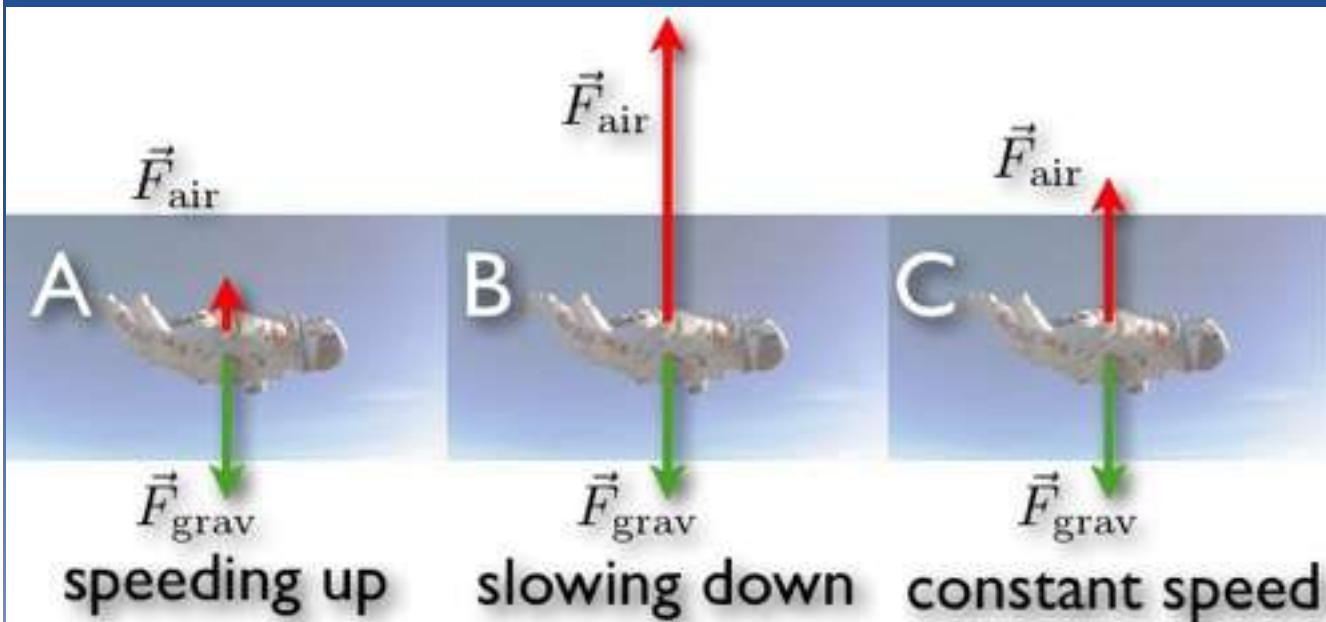
- Fold and attach the notes to page 151.
- Test your table members:
 - What is the difference between a contact and noncontact force?
 - What are examples of each?

FORCE

- Force is measured in Newtons
- Weight can also be measured in Newtons.
Why?
- Your weight can be converted to Newtons.
- $1 \text{ pound} = 4.44822162 \text{ Newtons}$
 - What is your weight in Newtons?

DRAWING FORCES ON DIAGRAM

- Forces are drawn with arrows. The direction of the arrow indicates the direction of the force.
- A large arrow means a greater force.
- A small arrow means a smaller force.



Pictures: Draw and label the forces

- 1st picture: Draw a snowboarder (or skier) going down a hill.
- 2nd picture: Draw yourself tossing a ball up in the air.
- 3rd picture: Draw a plane taking off.
- 4th picture: Draw yourself standing. (2 forces)



FRICTION

- What kind of surface would be best for running on?
- Friction is a force that resists the motion of two surfaces that are touching.
- There are three types of friction.

STATIC FRICTION

- Static friction: friction that prevents two surfaces from sliding past each other. No movement occurs if static friction is greater than the applied force.



SLIDING FRICTION

- When the applied force is greater than static friction motion and sliding friction occur.
- Sliding friction: friction that opposes the motion of surfaces sliding past each other



FLUID FRICTION

- Fluid friction: friction between a surface and a fluid (example: water, air)
 - For vehicles you'll often hear fluid friction called "drag"

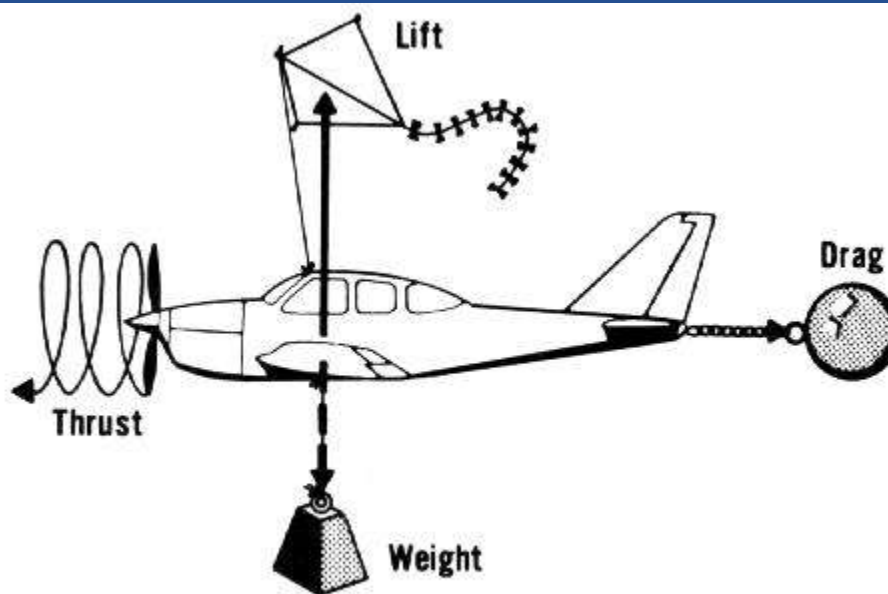


Figure 3-4 Four Forces Acting on the Airplane



Figure 8 Air resistance is greater on the flat paper. ▼





Scavenger Hunt

- You will work with your partner to identify whether the example is static, sliding, or fluid friction. #1-15
 - #16-20 are more involved activities. Read the directions and answer the questions.
- 