

Weight Gain and Loss

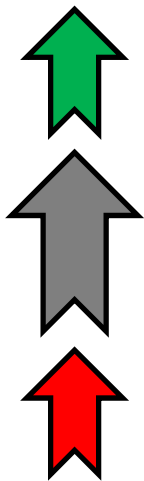


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Weight Gain and Loss

Take a heavy object in your palm and move it up and down; notice how the object's weight changes.

Rising &
Slowing Down:
Lose Weight

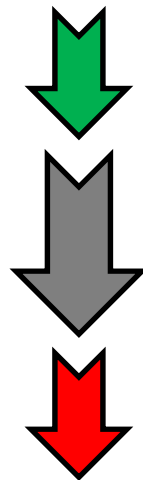


With gravity

Against gravity

Rising &
Speeding Up:
Gain Weight

Falling &
Speeding Up:
Lose Weight

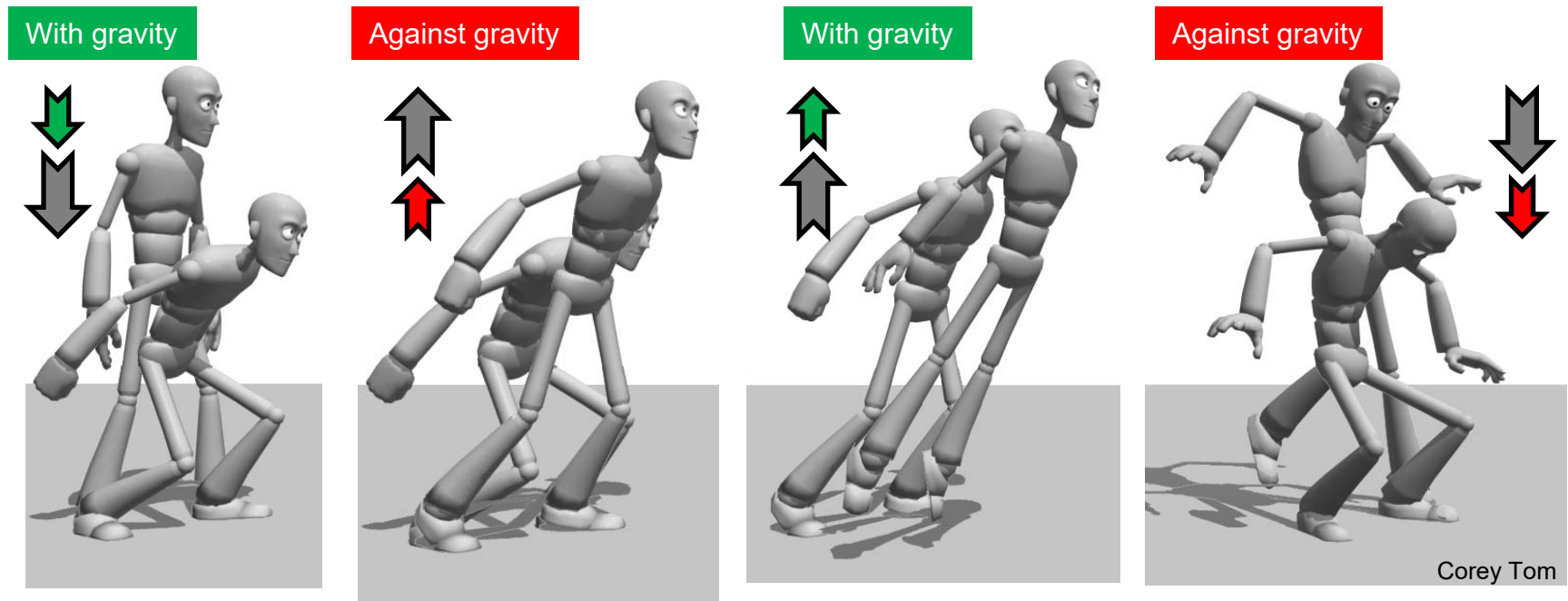


Falling &
Slowing Down:
Gain Weight



Dynamic Weight

Your weight on the ground varies as your body rises or falls, speeds up or slows down.



Falling &
Speeding Up:
Lose Weight

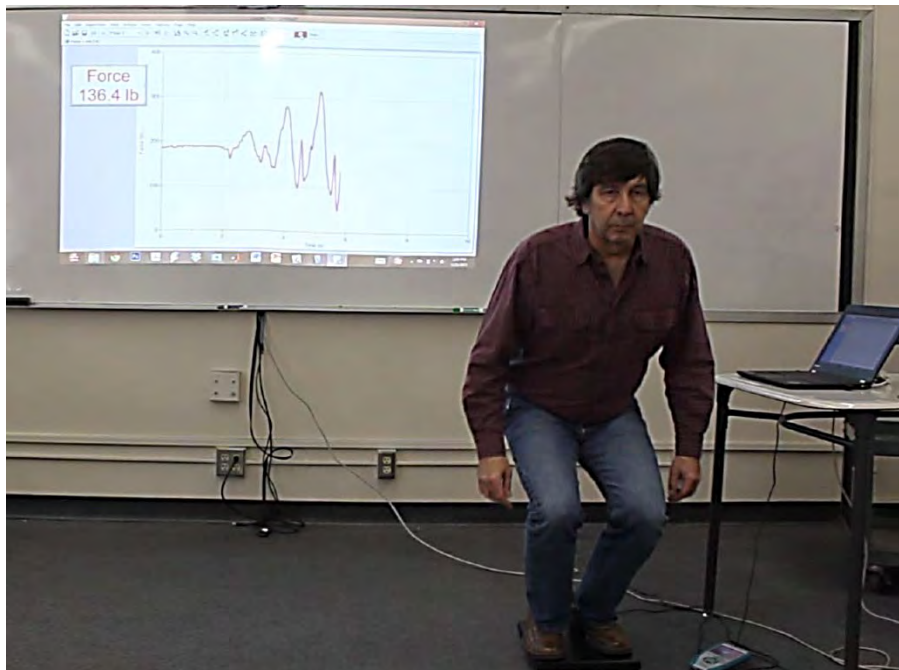
Rising &
Speeding Up:
Gain Weight

Rising &
Slowing Down:
Lose Weight

Falling &
Slowing Down:
Gain Weight

Measuring Weight Gain & Loss

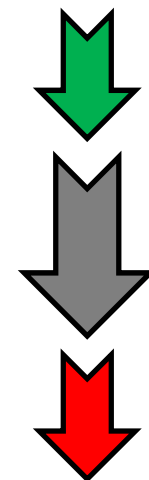
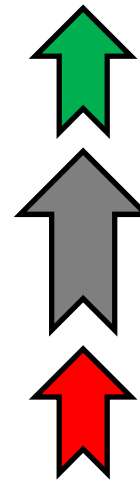
Gain and lose weight by moving your body up and down. Can move the whole body or just part of it, for example your arms.



With gravity

Rising &
Slowing Down:
Lose Weight

Falling &
Speeding Up:
Lose Weight



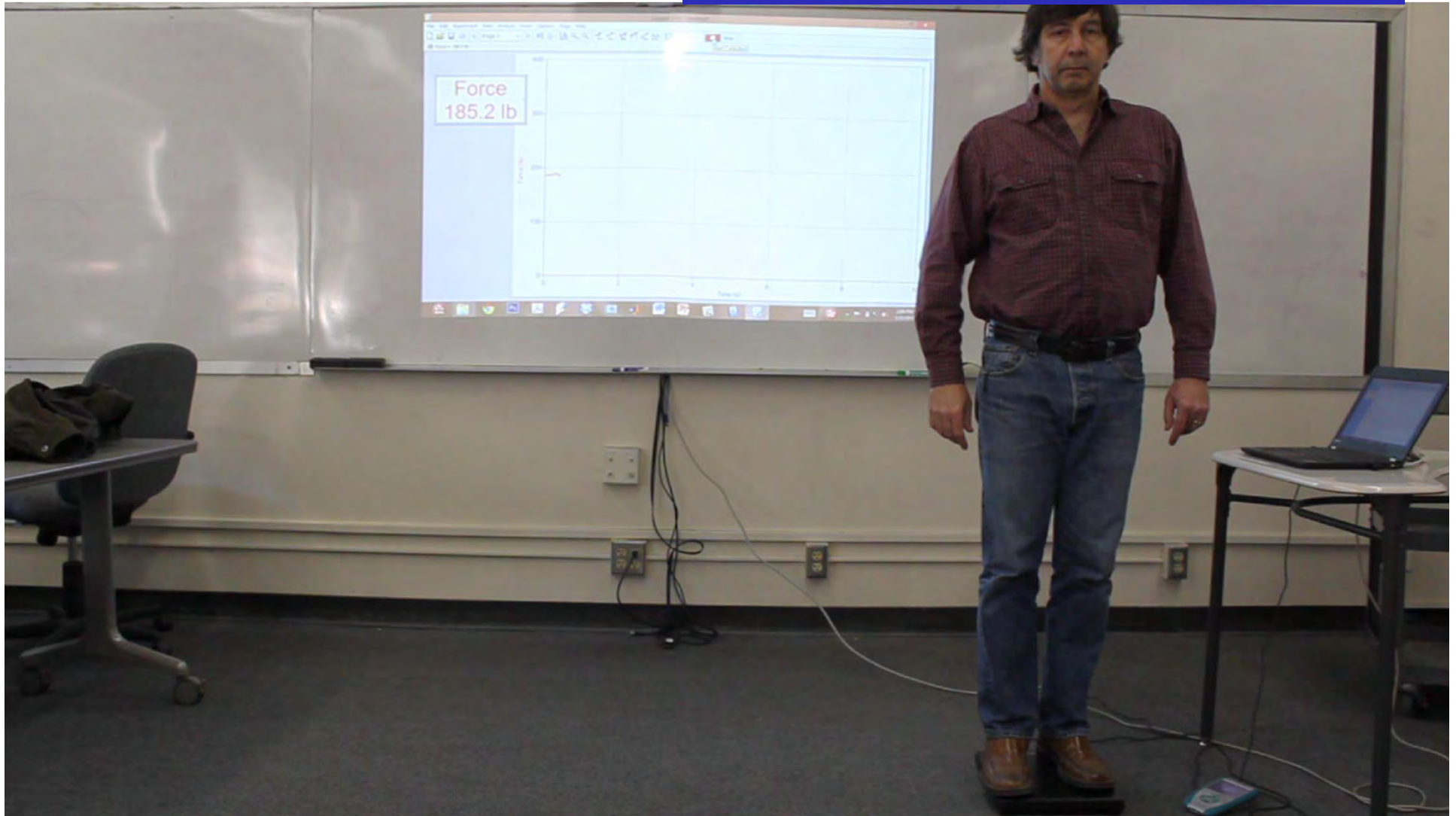
Rising &
Speeding Up:
Gain Weight

Falling &
Slowing Down:
Gain Weight

Against gravity

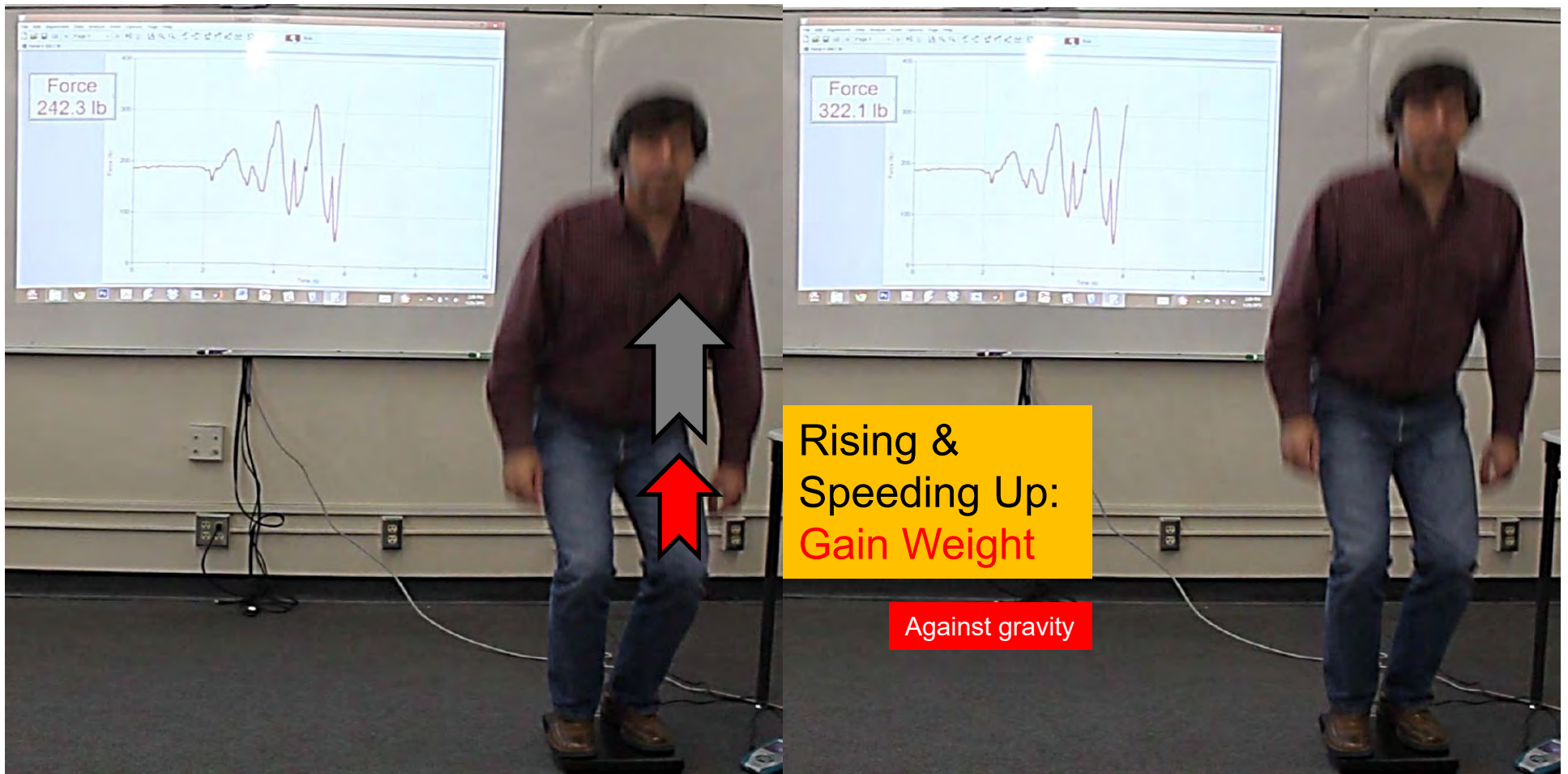
Moving the Torso

http://www.youtube.com/watch?v=d26xY_pcthY



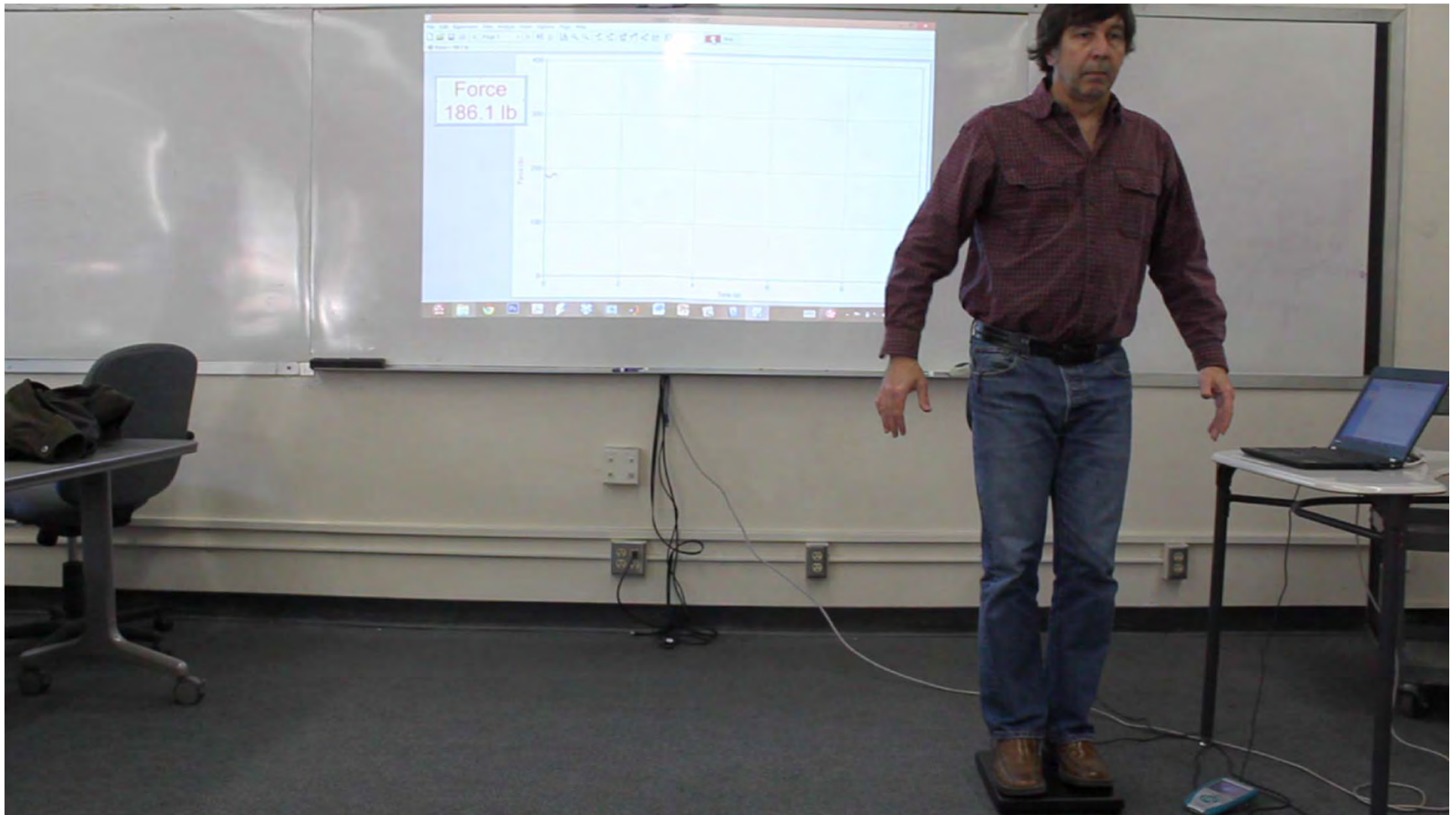
Moving the Torso

Large weight variations from moving up and down.



Moving the Arms

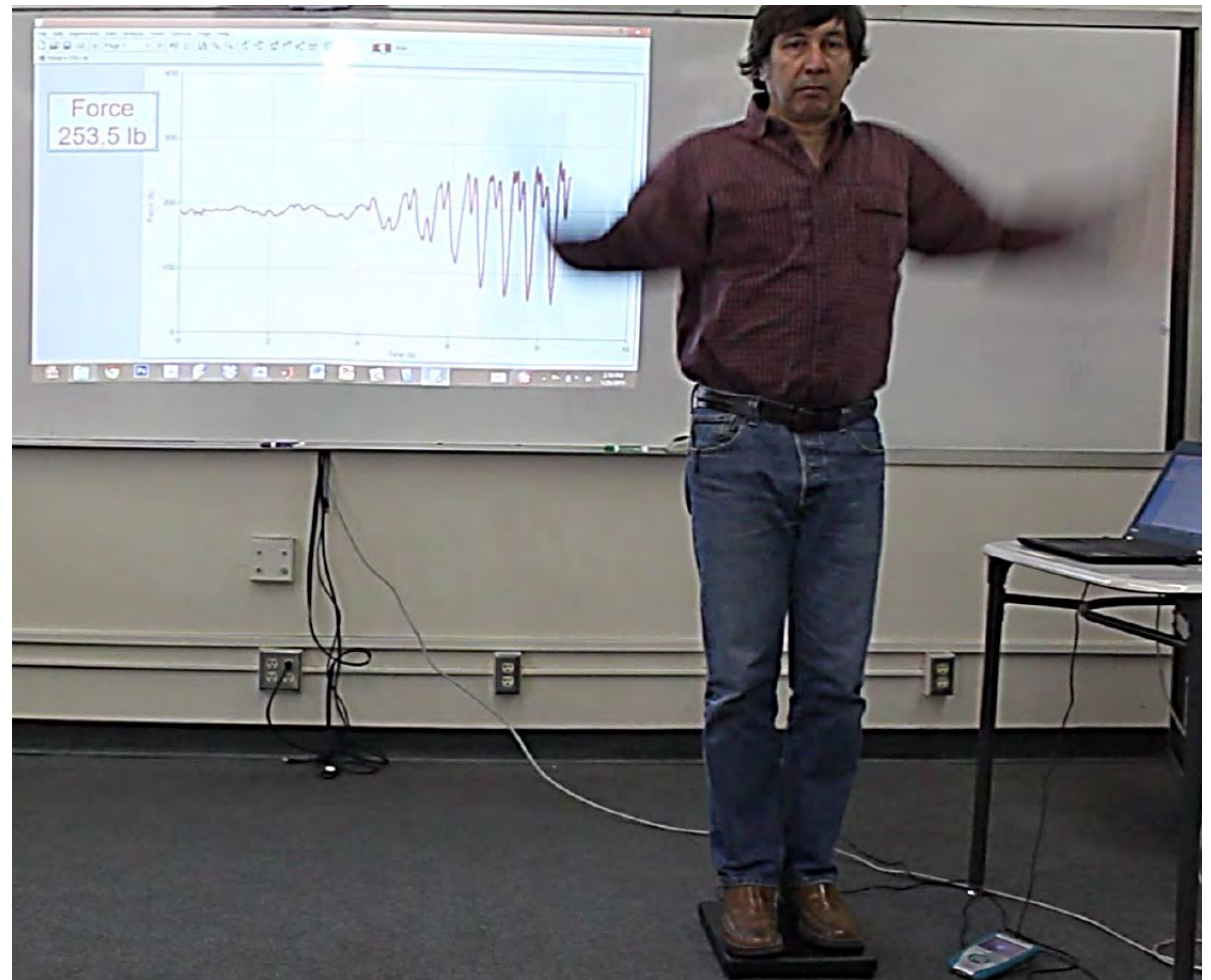
<http://www.youtube.com/watch?v=42f156YOVAc>



Moving the Arms

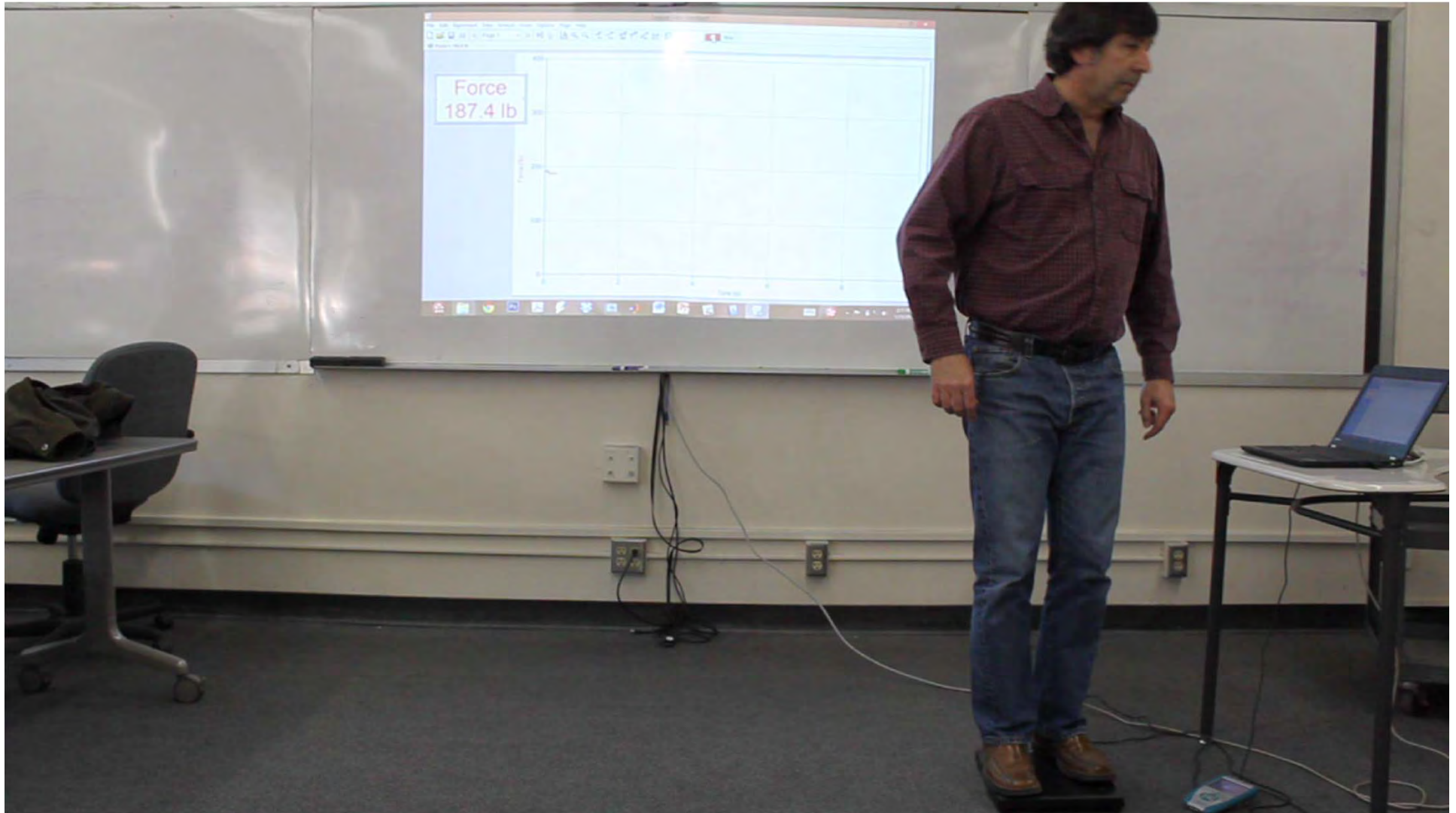
Flapping the arms moves the center of gravity up and down, causing weight changes.

My normal weight is about 180 pounds but here it varies between 50 to 270 pounds.



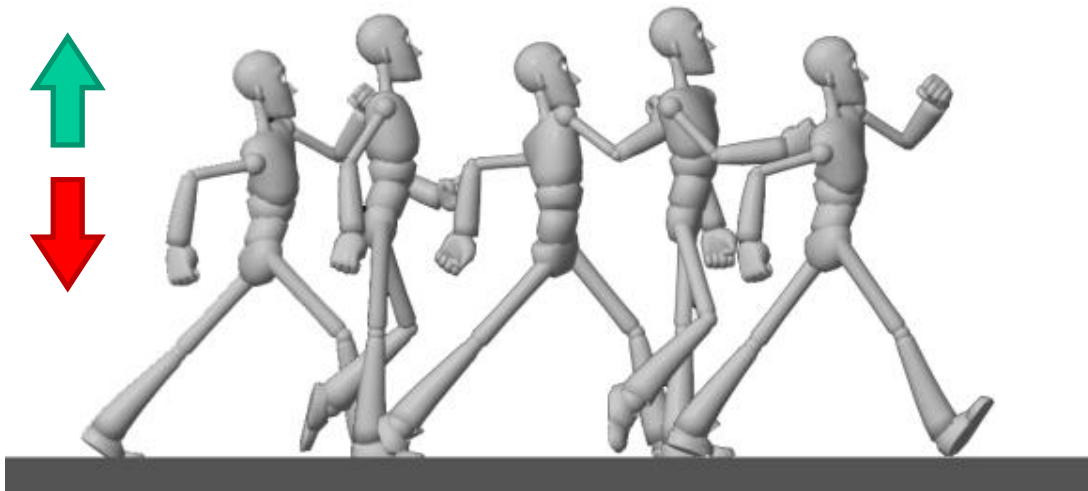
General Motion

<http://www.youtube.com/watch?v=QG4tPaygWTo>



Character Effects

The weight changes due to the up and down motion in a walk is seen in character effects, such as clothing, hair, etc.

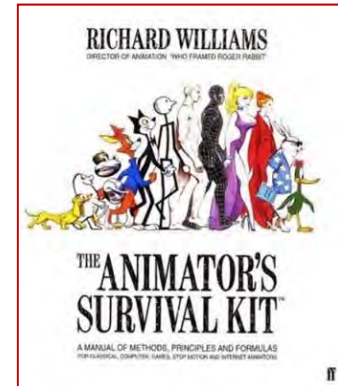


Walk in Slow-Motion

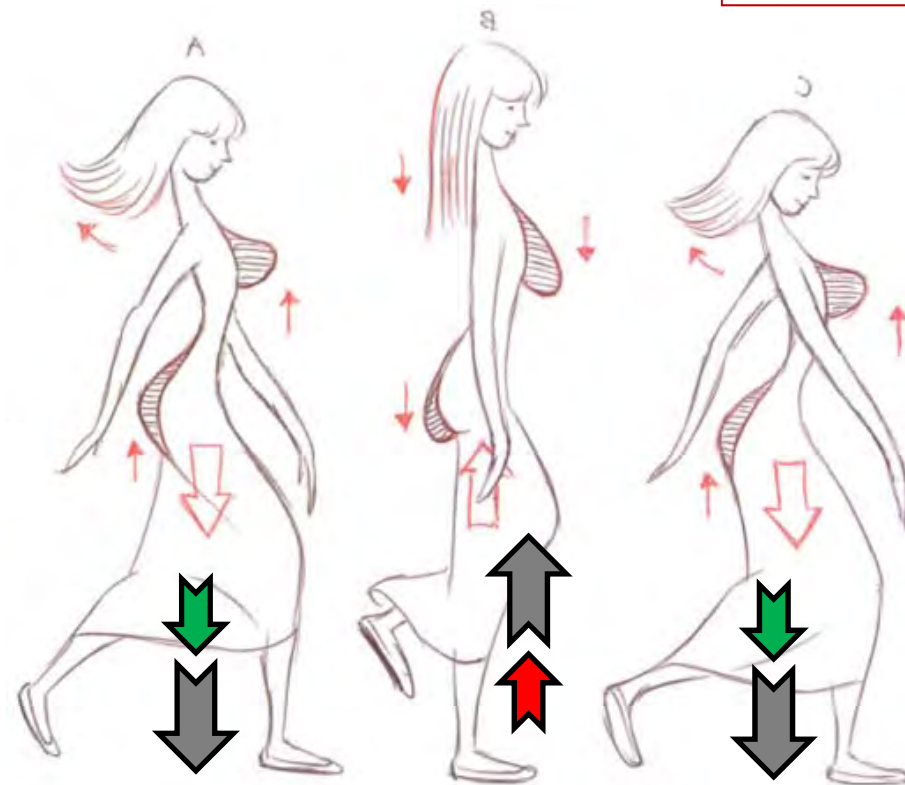
Notice the weight gain and loss in the hair of the woman with red hair.



“Counteraction”



Richard Williams writes, “When the character goes **up** – the drapery or hair or soft bits go **down**.”



Lose Weight

Gain Weight

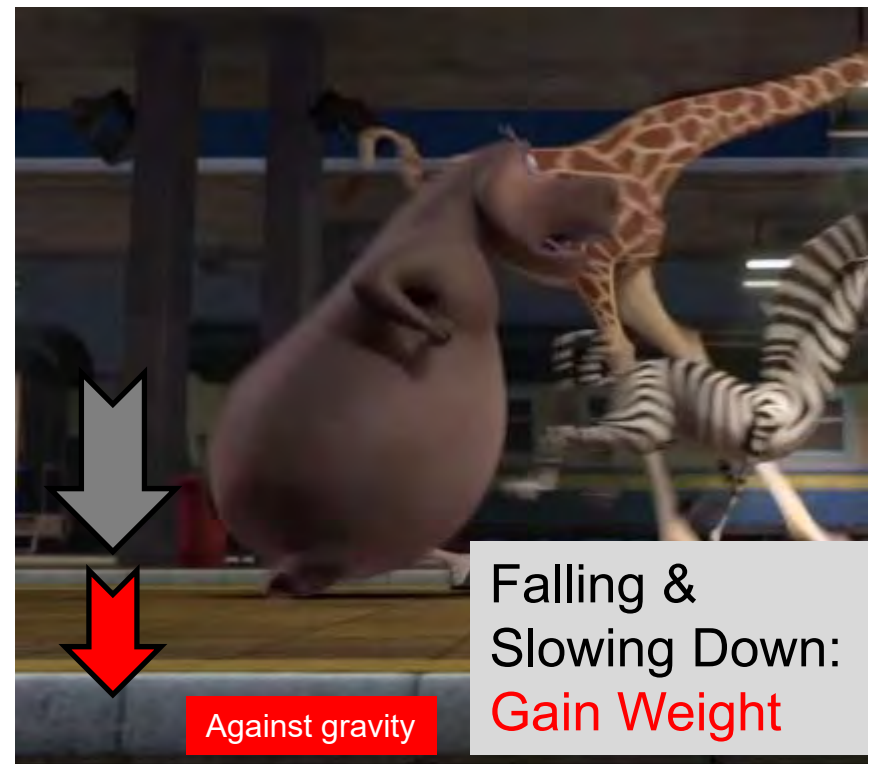
Lose Weight

Weight Gain and Loss



Weight Gain and Loss

Gloria's weight varies as she's running.



We can also understand this as follow-through and drag.

Summary

- Weight can vary when an object moves up or down, depending on the acceleration.
- Weight increases when the motion goes against gravity, such as rising and speeding up or falling and slowing down.
- Weight decreases when the motion goes with gravity, such as rising and slowing down or falling and speeding up.
- Weight gain and loss is “counteraction”; it’s seen in character effects (e.g., hair)