

Potential and Kinetic Energy

(Make a foldable set of notes)

What is Energy?

Energy = The ability to do work

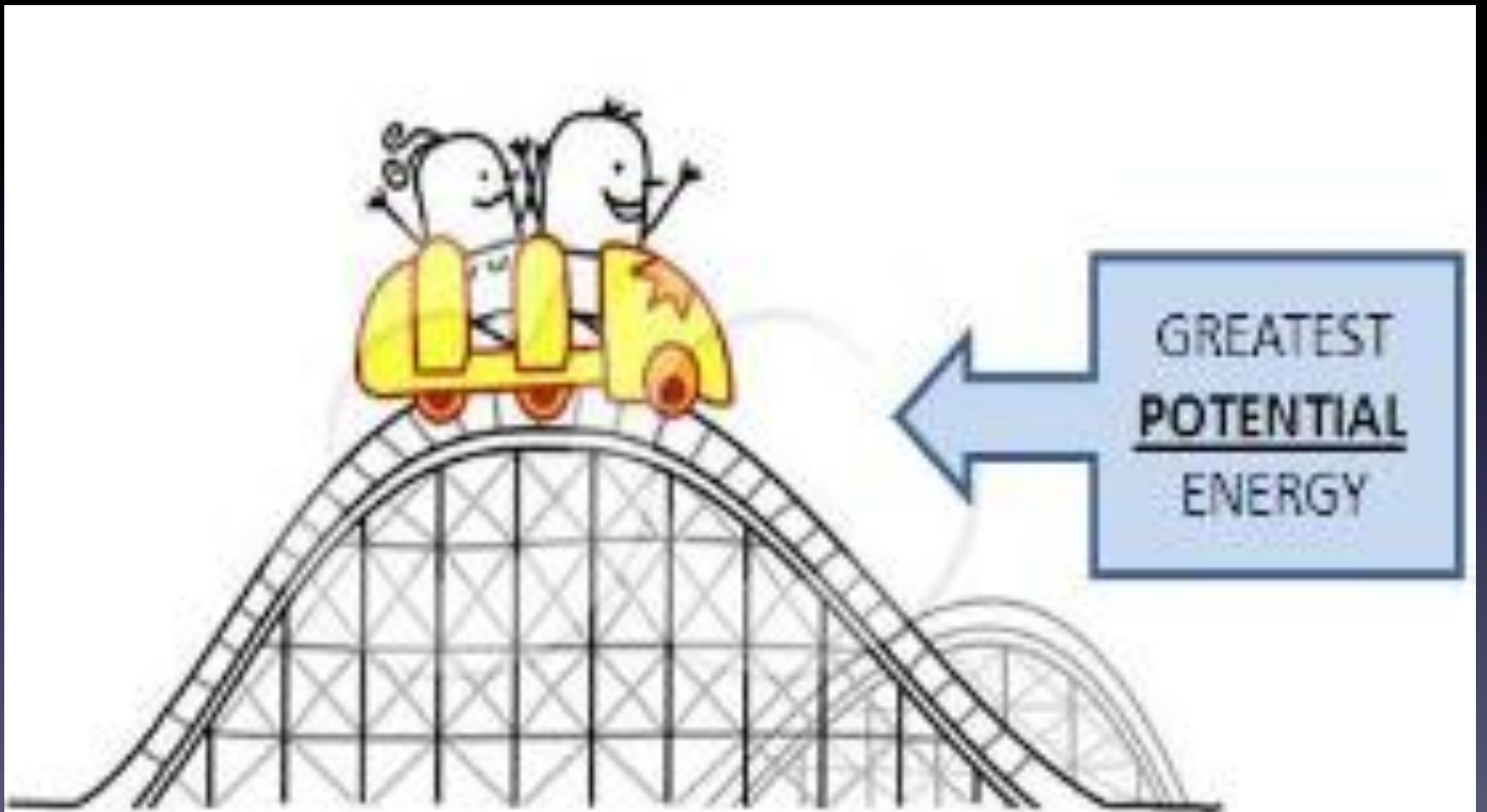
What is Work?

An object has to supply a force for another object to be displaced to be considered work.

Potential Energy

Stored energy that COULD do work.

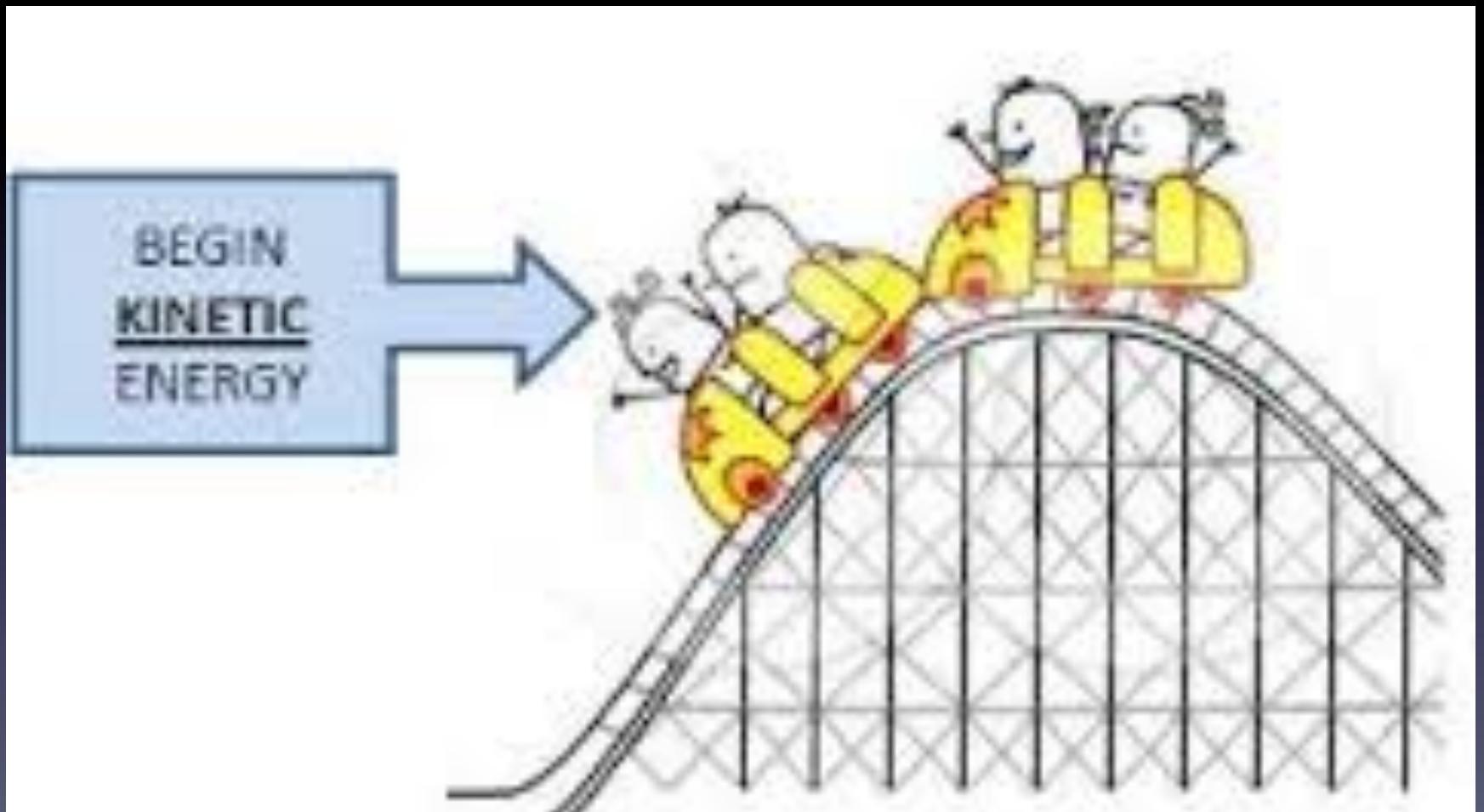
Potential



Kinetic Energy

Energy that DOES work.

Kinetic



Types of Potential Energy

Chemical = Energy that will be released
during a chemical reaction

- Eating food
- Batteries in your phone
- Gasoline in a car

Types of Potential Energy

Gravitational= Energy because of its
position

- Sled at the top of a snowy hill
- Roller coaster at the top of a hill
- Apple hanging on a tree

Kinetic Energy

Mechanical = Energy of motion

–Rock rolling down a hill

–Coaster running down the track

–Apple falling from a tree

Kinetic Energy

Sound = movement of energy
through waves

–Vibrations

Kinetic Energy

Heat = Movement of energy through
particles

–Temperature

Lets Review!

Roller Coaster Animation

Lets Practice!

Kinetic or Potential?



Kinetic or Potential?



Kinetic or Potential?



Kinetic or Potential?



Kinetic or Potential?



Kinetic or Potential?



Describe the energy in this picture



The iron hammer on its own has no kinetic energy, but it has some potential energy because of its weight.

To drive a nail into the piece of wood (which is work), he has to lift the iron hammer up, which increases its potential energy because of its high position.

He then has to force it to move at great speed downwards (now has kinetic energy) to hit the nail.