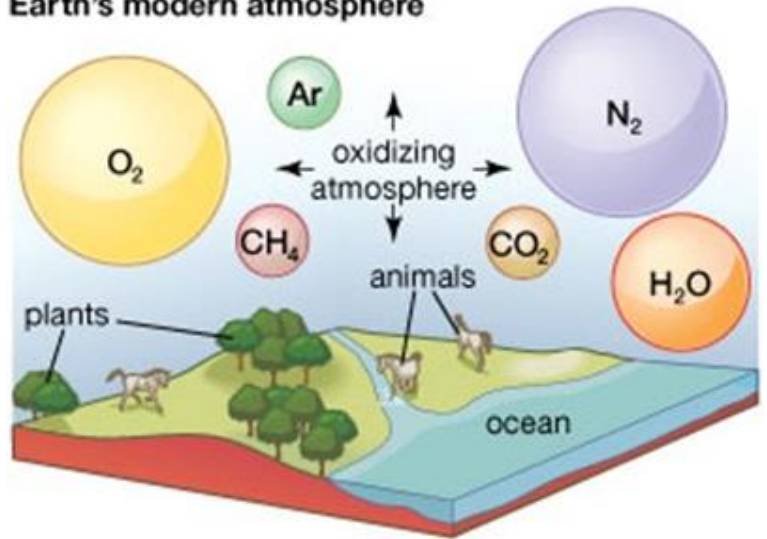


Name _____

STARBASE Hill Day 1 Review

- Here is an illustration of the gases in the Earth's atmosphere. Please circle all the gases representing elements and place an "X" over the gases representing compounds.
- Please explain why you circled or placed an "X" over the gases.

Earth's modern atmosphere



- First, watch the YouTube video to the left using the address provided. You should recognize the below forms of energy from the video, write if the energy form is **potential** or **kinetic**. Next, explain where you saw it in the video.



<https://www.youtube.com/watch?v=GOMIBdM6N7Q>

Gravitational: _____

Chemical: _____

Thermal: _____

Electrical: _____

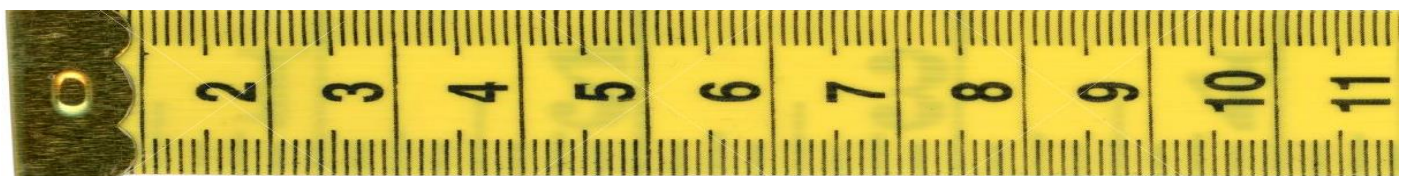
Mechanical: _____

- Robogator's **behavior** was to attack monkeys when they tripped the eye sensors on his **body**. Robogator's **control** would only allow him to walk 650 centimeters (cm) before a buzzer sounds and scares anything around him. The measurements below are in decimeters (dm). Answer the following questions.

What is the distance, in decimeters, Robogator must go to get this monkey? _____

What is the distance, in centimeters, Robogator must go to get this monkey? _____

Will Robogator get this monkey before the buzzer sounds? _____



The answers may vary but should follow along the line of thinking with the answers below. In the middle section, especially, a variety of answers may be given.

Name _____

Date _____

STARBASE Hill Day 1 Review

- Here is an illustration of the gases in the Earth's atmosphere. Please circle all the gases representing elements and place an "X" through the gases representing compounds.
- Please explain why you circled or placed an "X" over the gases as you did.

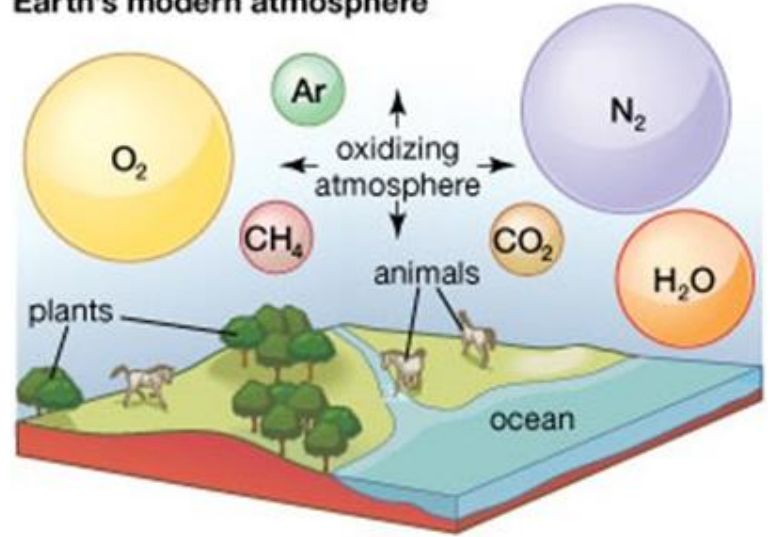
The gases that were circled have

the same type of atoms bonded

together, while the gases with the

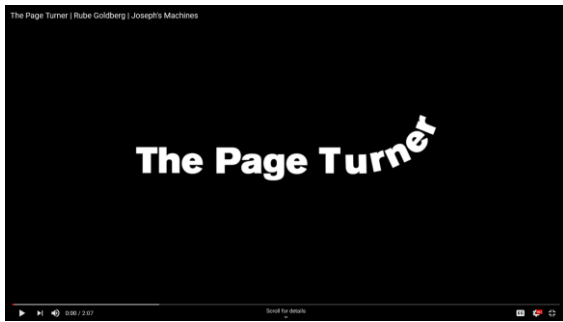
"X" have different atoms bonded

Earth's modern atmosphere



- First, watch the video with the address to the left. The following forms of energy can be seen. Write if the energy form is **potential** or **kinetic**, then explain where you saw it in the video.

Gravitational: Potential - Any location in the video where something is set up to fall.



<https://www.youtube.com/watch?v=GOMIBdM6N7Q>

Chemical: Potential - at the beginning, there are two small containers holding chemicals that once combined instantly combust/Also, the propane in the small tank.

Thermal: Kinetic - the burning of the fuse holding the billiard balls/the flame used to boil the liquid which evaporates into the sponge

Electrical: Kinetic - the hair dryer being turned on by the laptop falling.

Mechanical: Kinetic - Anywhere along the route where an object is providing a push or pull to another object like the action of a simple machine.

- Robogator's **behavior** was to attack monkeys when they tripped the eye sensors on his **body**. Robogator's **control** would only allow him to walk 650 centimeters (cm) before a buzzer sounds and scares anything around him. The measurements below are in decimeters (dm). Answer the following questions.

What is the distance, in decimeters, Robogator must go to get the monkey? 7.5 dm

What is the distance, in centimeters, Robogator must go to get the monkey? 750 cm

Will Robogator get the monkey before the buzzer sounds? No

