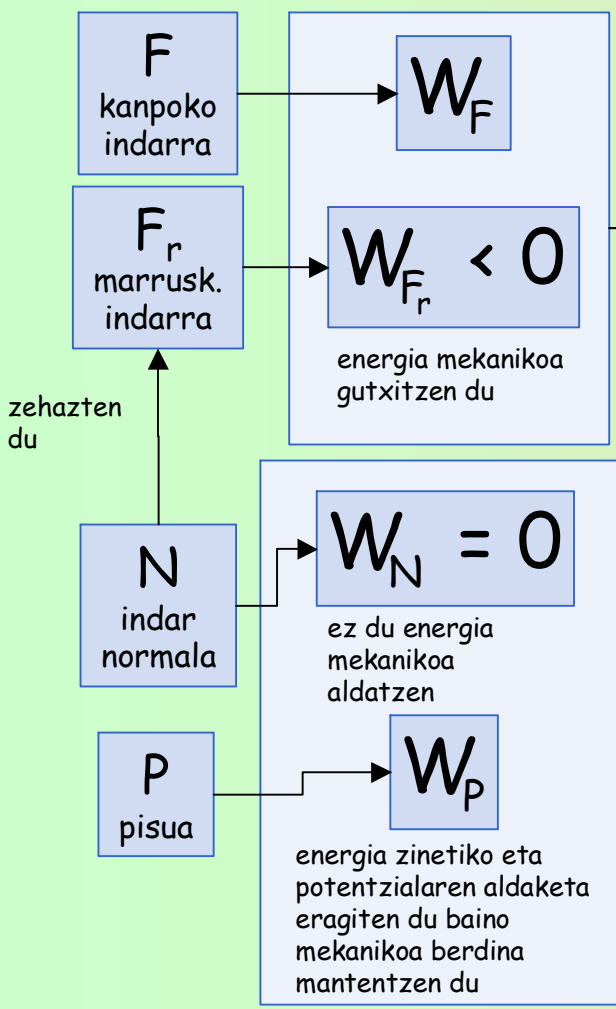
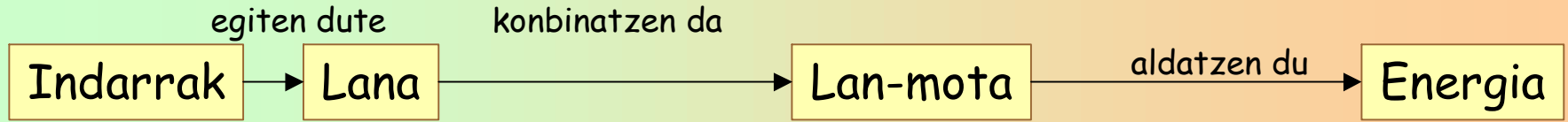


# Energia mekanikoa: printzipioak



$$W_{ez-k} = W_F + W_{F_f}$$

$$W_{tot} = W_F + W_{F_r} + W_N + W_P$$

$$W_{ez-k} = \Delta E$$

$$\downarrow \Delta E = E_{buk} - E_{has}$$

$$E_{buk} = E_{has} + W_{ez-k}$$

**LEGEA:**  
Energia mekanikoaren kontserbazioa

$$W_{tot} = \Delta E_z$$

$$\downarrow \Delta E_z = E_{z,buk} - E_{z,has}$$

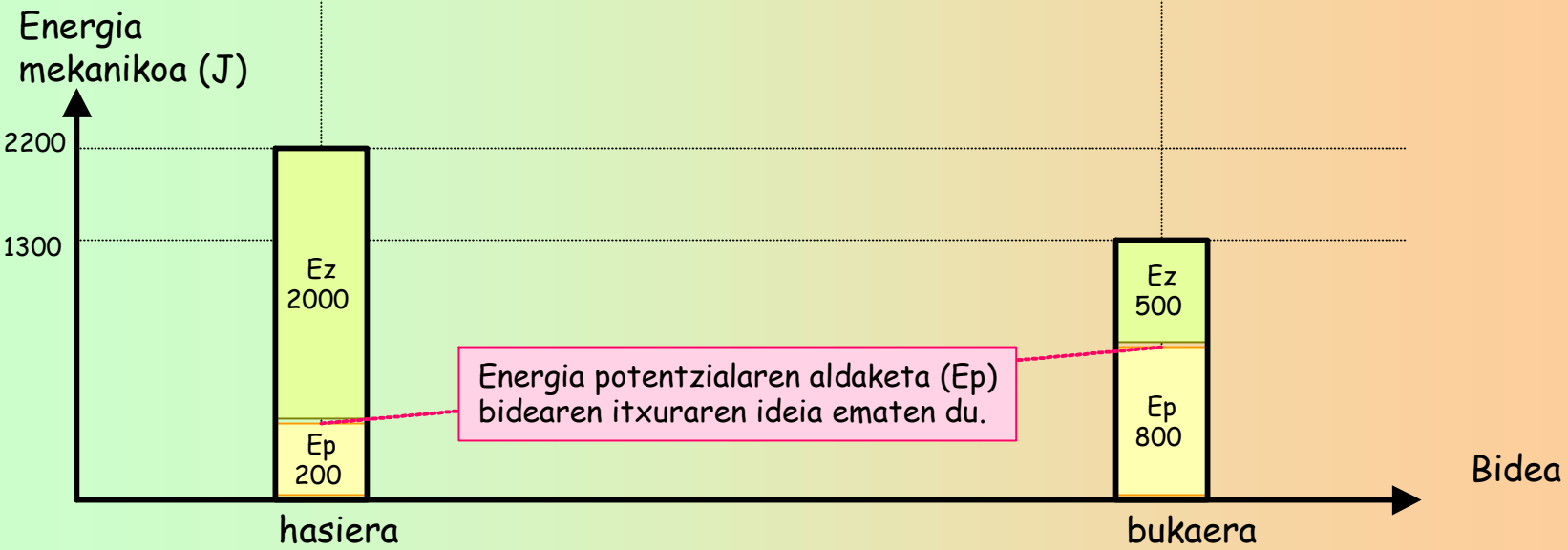
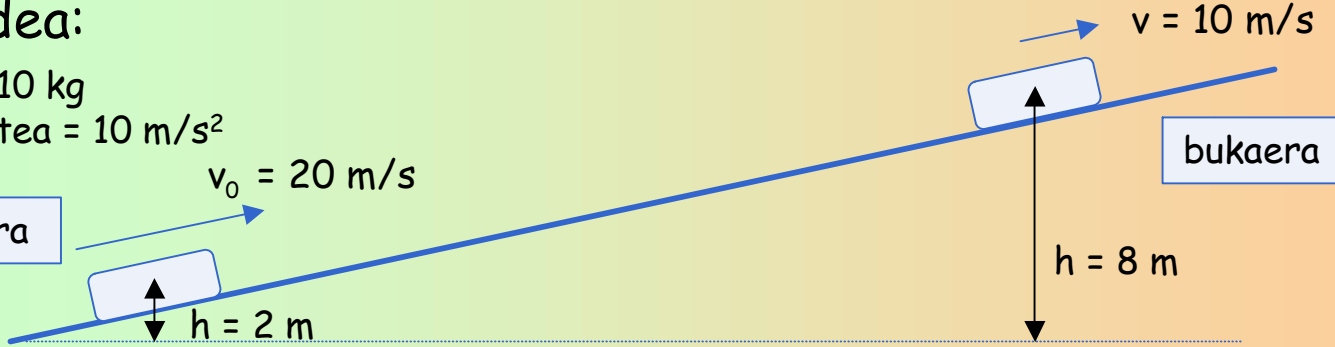
$$E_{z,buk} = E_{z,has} + W_{tot}$$

**LEGEA:**  
Indar bizien teorema

# Energia mekanikoa: printzipioak

## Adibidea:

masa = 10 kg  
grabitatea = 10 m/s<sup>2</sup>



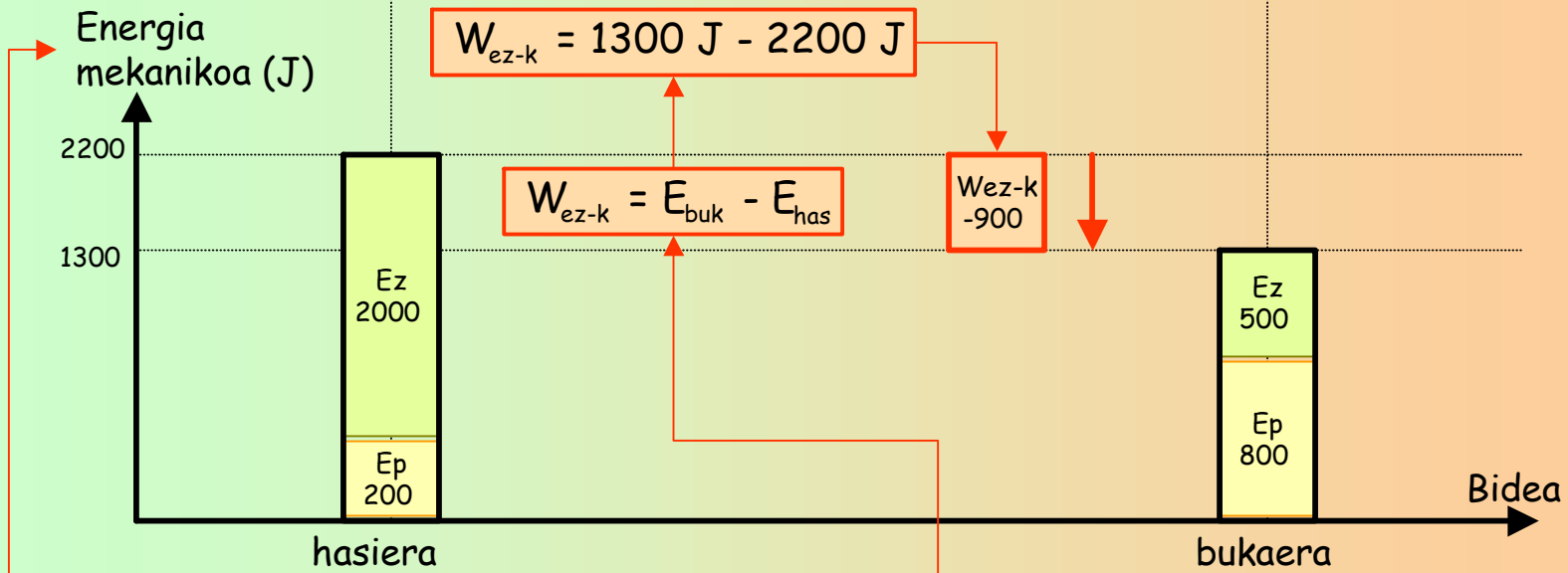
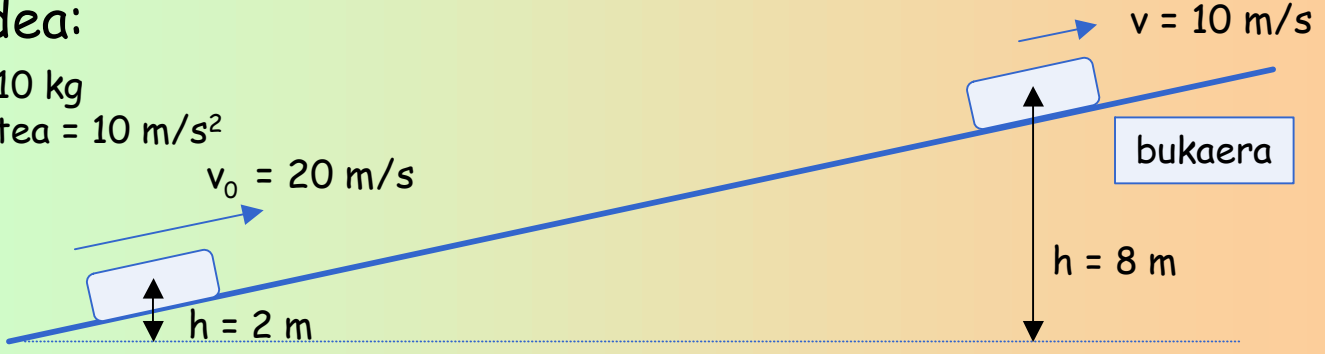
$$E_{buk} = E_{has} + W_{ez-k}$$

$$Ez_{buk} = Ez_{has} + W_{tot}$$

# Energia mekanikoa: printzipioak

Adibidea:

masa = 10 kg  
grabitatea = 10 m/s<sup>2</sup>



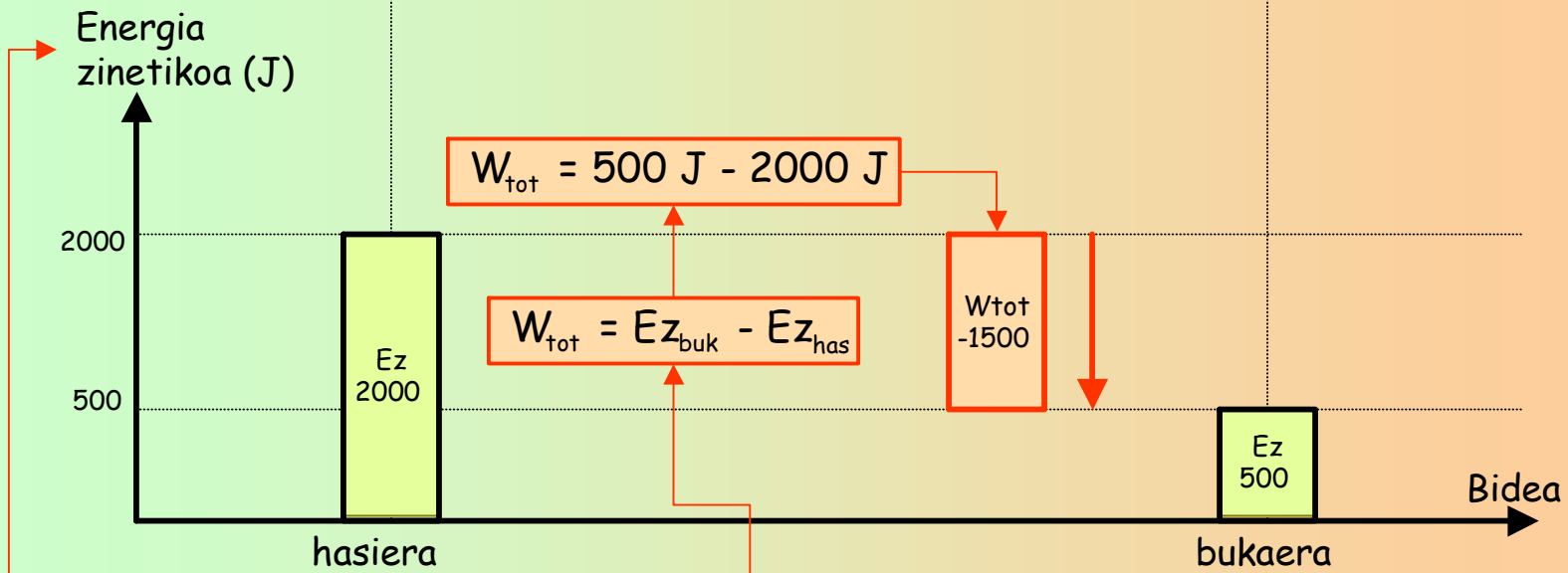
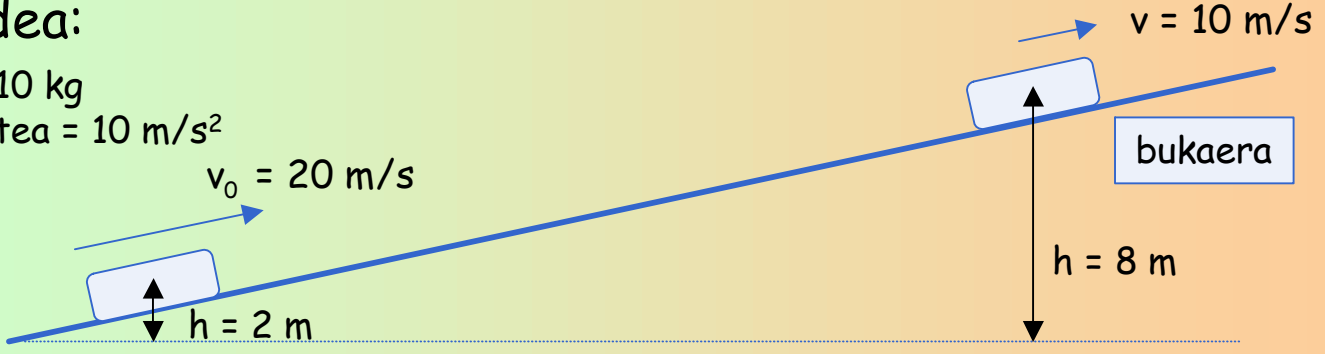
erlazionatuta

Energia mekanikoaren kontserbazioa

# Energia mekanikoa: printzipioak

Adibidea:

masa = 10 kg  
grabitatea = 10 m/s<sup>2</sup>



erlazionatuta

Indar bizien teorema