

## Answer on the question #42204, Chemistry, Other

### Question:

State the energy that takes place as a person falls from 20m to 25m below platform if he's mass is 75kg.

### Solution:

The potential energy of a near earth gravity field is:

$$U = mgh$$

To state the energy takes place as a person falls from one height to another, we can use the following expression:

$$E = U_2 - U_1 = mg(h_2 - h_1)$$

As the values of height are defined as ones below the platform, we should use negative magnitudes, -20 and -25 m respectively:

$$E = 75 * 9.8 * (-20 + 25) = 3675 J$$

*Answer: 3675 J*