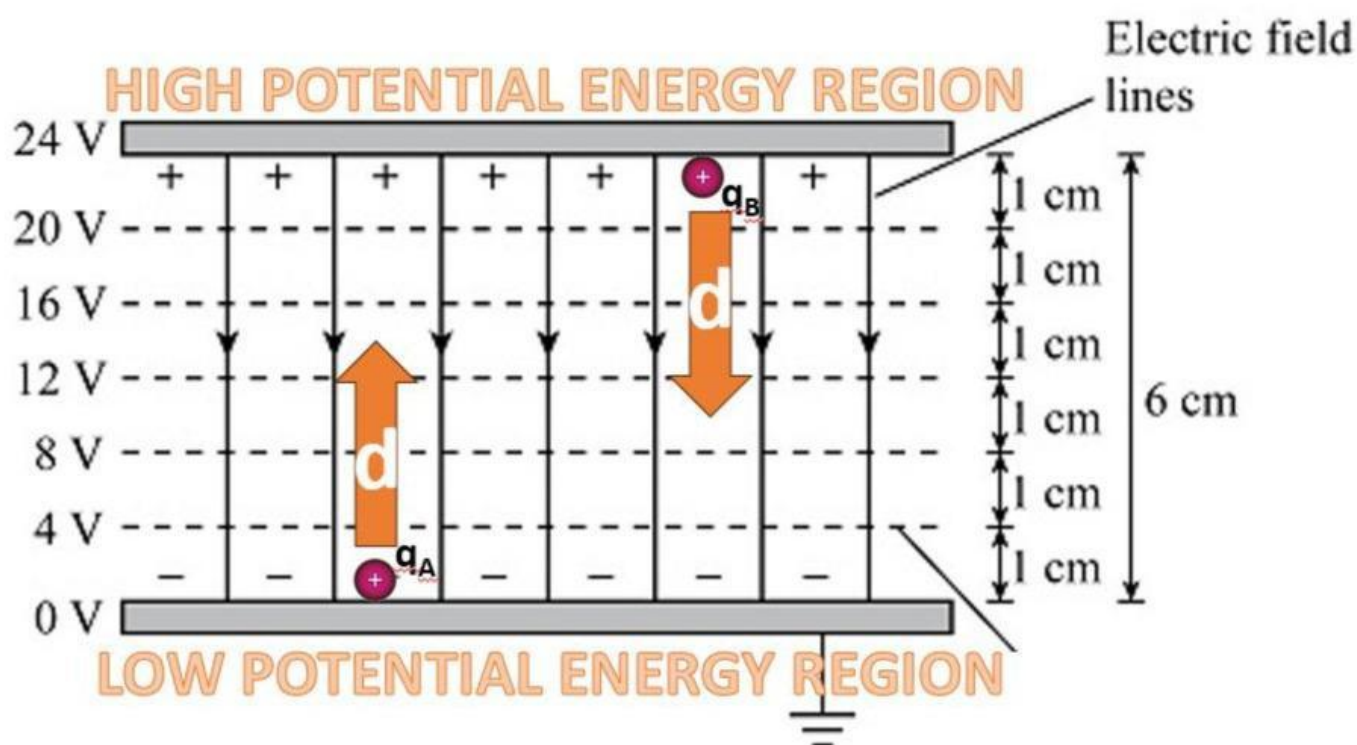


## Member 1: Electric Potential Energy

Directions: Analyze the picture below to answer the following questions. For nos., 1-4, choose your answers from the words enclosed with parentheses.



The picture above shows two identical positive test charges,  $q_A$  and  $q_B$ , initially positioned at different plates.  $q_A$  is moved to the positive plate, and  $q_B$  is moved to the negative plate as shown by the displacement (d) arrows.

1. What happens to the electric potential energy of  $q_A$  as it goes to the positive plate?  
Ans. The electric potential energy \_\_\_\_\_ (increases or decreases).
2. What happens to the electric potential energy of  $q_B$  as it goes to the negative plate?  
Ans. The electric potential energy \_\_\_\_\_ (increases or decreases).
3. When does the charge gain potential energy with respect to the electric field?  
Ans. The charge gains electric potential energy if it moves \_\_\_\_\_ (along or against) the electric field.
4. When does the charge lose potential energy with respect to the electric field?  
Ans. The charge loses electric potential energy if it moves \_\_\_\_\_ (along or against) the electric field.
5. What is electric potential energy?  
Ans.