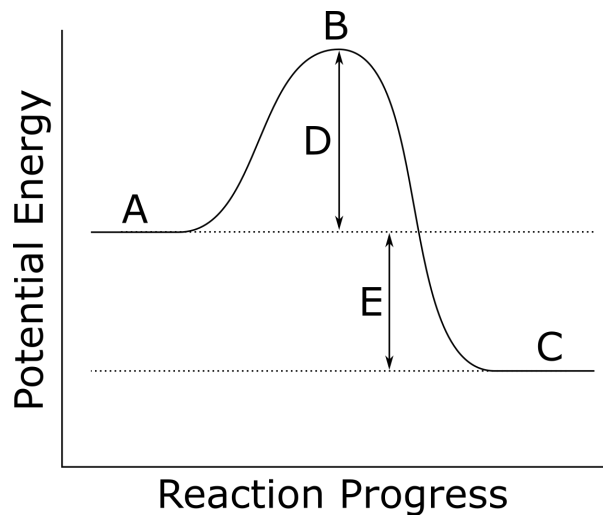


Quiz 12.3 – The Arrhenius Equation

Name: _____

Question 1

Name the two conditions required for a molecular encounter to lead to reaction

**Question 2**

Give the name for each item labeled on the reaction coordinate diagram at left

A:

B:

C:

D:

E:

A reaction is carried out at two temperatures, with the rate constant carefully measured. Data are given below:

$T (^{\circ}\text{C})$	$k (M^{-1}s^{-1})$
15.00	1.6×10^{-4}
42.00	8.7×10^{-4}

Question 3

Give the activation energy and frequency factor for this reaction

Question 4

What is the overall reaction order for the reaction from Question 3?

Who Has Seen the Wind?

By Christina Rossetti

Who has seen the wind?
Neither I nor you:
But when the leaves hang trembling,
The wind is passing through.

Who has seen the wind?
Neither you nor I:
But when the trees bow down their heads,
The wind is passing by.