

## Reaction Spontaneity

### Activity 1 :

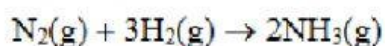
Use each of the terms below to complete the statements.

second law of thermodynamics	entropy	free energy	spontaneous process
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1. A(n) \_\_\_\_\_ is a physical or chemical change that occurs with no outside intervention.
2. A measure of disorder or randomness of the particles that make up a system is called \_\_\_\_\_.
3. The \_\_\_\_\_ states that spontaneous processes always proceed in such a way that the entropy of the universe increases.
4. \_\_\_\_\_ is the energy that is available to do work.

### Activity 2 :

**Predict** *whether entropy increases or decreases for the reaction below and explain your reasoning.*



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