

Energy Changes in Chemical reactions for KS3 Science - Worksheet

1. In an exothermic reaction does the temperature go up or down?

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2. In an endothermic reaction does the temperature go up or down?

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3. Name two examples of exothermic reactions

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4. Name two examples of endothermic reactions

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5. Circle the correct answers.

The bonds between the atoms of the reactants / products need to be broken first, this is an endothermic / exothermic process. Then bonds are made between the atoms of the reactants / products, this is an endothermic / exothermic process.

6. Use the table to answer this question

Reaction	Starting temperature °C	Final temperature °C
A	20	31
B	22	18
C	21	25

a. Decide whether each reaction is endothermic or exothermic, explain how you could tell.

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b. Which reaction has the largest energy change?

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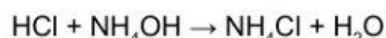
7. In an exothermic reaction, is enthalpy change positive or negative?

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8. In an endothermic reaction, is enthalpy change positive or negative?

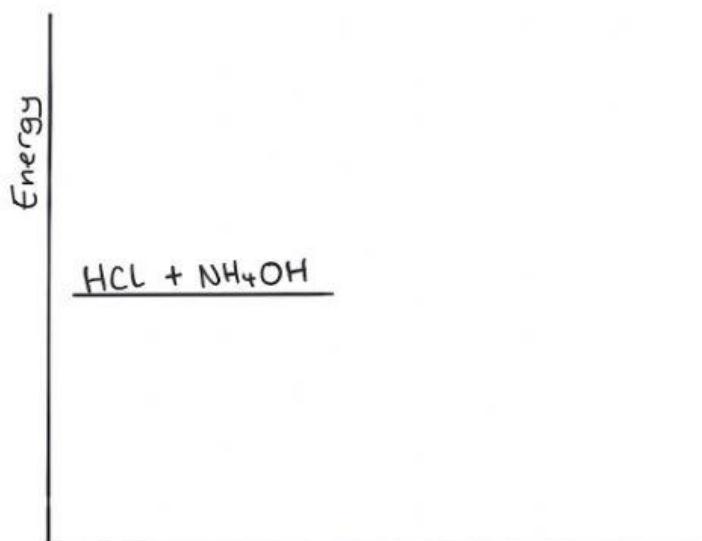
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9. When hydrochloric acid reacts with ammonium hydroxide in a beaker, the temperature goes up.



$$\Delta H = -53.4 \text{ kJ/mol}$$

Complete the energy profile diagram and state whether the reaction is endothermic or exothermic, explain your answer.



10. What are the units for enthalpy change, ΔH

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You may like to watch this lesson on the different types of Chemical reactions.



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