

Reactions

3. Chemical Energy

CONCEPT 2

LESSON GUIDE

ENDOTHERMIC REACTIONS

PRECISE LEARNING POINTS

KNOW

I know what an endothermic reaction is.

APPLY

I can apply my knowledge to explain what happens to chemical bonds during an endothermic reaction.

EXTEND

I can extend my knowledge to use data for bonding energy to calculate energy change in an endothermic reaction.

NOTES

Exothermic reactions give out more energy to the surroundings than they take in. Endothermic reactions take in more energy than they give out. Endothermic reactions tend to be less common than exothermic reactions, but they have many everyday uses.

Endothermic reactions cause a decrease in temperature, they are often used in cool packs for sports injuries. The cold packs usually contain a mixture of a salt and water, for example when ammonium nitrate dissolves in water the temperature decreases.

An energy profile diagram can be used to describe an endothermic reaction.

