

Mass-Energy Stoich

Def: Describes the amount of Energy absorbed or released during a chemical reaction



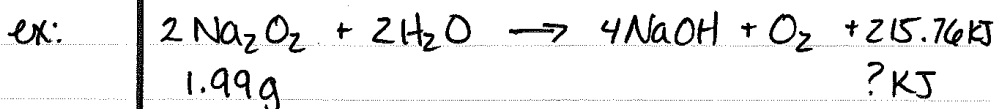
Q Heat $-393.509 \text{ heat of rxn}$

$-Q$ heat released (product) example

$+Q$ heat absorbed (reactant)

ex: $2.51 \text{ g C} = ? E$

2.51 g C	1 mol C	393.509 KJ	$=$	-82.2 KJ
	12.01 g C	1 mol C		



$1.99 \text{ g Na}_2\text{O}_2$	$1 \text{ mol Na}_2\text{O}_2$	215.76 KJ	$=$	-2.75 KJ
	$78.0 \text{ g Na}_2\text{O}_2$	$2 \text{ mol Na}_2\text{O}_2$		

↑
released
 2.75 KJ