

# Sustainable Science

## Green Chemistry in your Classroom

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# **Sustainable Science**

## **Green Chemistry in your Classroom**



**Green Chemistry:  
Preventing Pollution  
Sustaining the Earth**



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# **Principles of Green Chemistry**

- **Waste Prevention**
- **Atom Economy**
- **Safer Solvents**
- **Energy Efficiency**
- **Renewable Feedstocks**
- **Design for Degradation**



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## **Green Chemistry in your Classroom**



***Safety first... and last***

**Use nontoxic/nonhazardous  
starting materials**

# ***Clock Reaction***

**Sudden, sharp change when  
reaction is complete.**

**“Greener” way to demonstrate  
reaction rate.**



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### ***Use safer solvents***

**1000Mg vitamin C tablet**

**Water**

**Iodine**

**Hydrogen peroxide**

**Liquid starch**

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*Two reactions: running clock  
and an alarm reaction*

