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**Student Activity- Redox Reaction of KClO3**

**Learning Objective TRA-2.C** Represent a balanced redox reaction equation using

 half-reactions.

 **TRA-1.D** Explain the relationship between macroscopic characteristics and bond interactions for:

 **a.** Chemical processes.

 **b.** Physical processes.

**Science Practice** **6.B** Support a claim with evidence from experimental data.

 **5.E** Determine a balanced chemical equation for a given chemical phenomena.

Observe the demo of what happens when sugar is added to molten potassium chlorate. Watch the changes as they occur. Write down your observations. Explain what is happening to the potassium chlorate

**Observations**

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**Conclusions**

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**1.** Write the balanced reaction for the decomposition of potassium chlorate into

 potassium chloride and oxygen.

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**2**. What part of the potassium chlorate is being oxidized and what part is being reduced? Show all of the oxidation states of all the species that are changing in this reaction.

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**3**. Why was there a purple-like color seen during this reaction? Would you expect the same color with sodium chlorate's decomposition? Why or why not?

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