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## The Chemical Kidney Demonstration Worksheet

## **Discussion Questions**

1. Note the initial contents of each beaker, as well as the final color.

Beaker 1 –

Beaker 2 –

Beaker 3 -

Beaker 4 –

Beaker 5 –

- 2. Write the following balanced chemical equations for the reactions that occurred in this demonstration. Note the formation of ferric tannate in Beaker 4 and the iron(III) oxalate complex in Beaker 5 are not included, due to their unknown compositions.
  - *a*. The combination of iron(III) ions with water (Beaker 1)
  - b. Hydrated iron(III) ions reacting with thicocyanate ions (Beaker 2)
- 3. The same reaction occurs in Beaker 2 as in Beaker 3 Beaker 3 reacts with the excess hydrated iron(III) ions from Beaker 2. Why, then, is Beaker 3 a different color?

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