Sulfur Lab 3/12/05 3:43 PM

ALLOTROPIC FORMS OF SULFUR

| Name | Period | |
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ALLOTROPIC -- Different arrangement of atoms of the same element.

RHOMBIC SULFUR -- Crystals with opposite side parallel.

DEMO: Prepare by the evaporation of a sulfur solution.

MONOCLINIC SULFUR -- Needle-like crystals.

GOGS ON!

PREPARATION: List your observations on the back.

- 1. Fill a sulfur TT 3/4 full of sulfur.
- 2. Very gently just melt the sulfur (114°C).
- 3. Pour the sulfur into a *cootie*.
- 4. As soon as it solidifies, break it in half.
- 5. Observe all. List your observations on the back. Who has the greatest crystals?

AMORPHOUS SULFUR-- No definite shape.

PREPARATION: List your observations on the back.

- 1. Prepare a beaker of water brim-full.
- 2. Place a piece of paper under the beaker of water to protect the table top.
- 3. Refill the above TT 3/4 full of sulfur.
- 4. Heat the sulfur to boiling (400°C) observing all.
- 5. **VERY CAREFULLY** pour the boiling sulfur into the beaker of water.
- 6. **OBSERVE ALL**. Fondle the amorphous sulfur, and make a Christmas Tree ornament.
- 7. Return the TT when is cool. Do NOT use water!

CRITIQUE OF THE LAB: