Smaller and Smaller

Procedure

1. Observe  Use a hand lens to observe chalk, wood, sandpaper, and a magazine photo. Record the appearance of each material.

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2. Observe  Gently rub the chalk on the sandpaper over a sheet of black construction paper. Use the hand lens to observe the appearance of the particles of chalk on the paper. Record your observations. Set aside the black paper with the chalk particles. **Safety:** Wear goggles while using the sandpaper.

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3. Repeat step 2, rubbing the wood on clean sandpaper over a clean sheet of black construction paper.

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4. Compare  Use a microscope to observe the chalk particles, wood particles, and magazine photo. Draw the smallest details you can see of each material.
5. **Communicate** Share your observations with classmates. Talk about why your drawings might look different.

**Conclusion**

1. **Compare** How did the materials look under the hand lens as compared with the microscope?

2. **Infer** If you could magnify the materials more, what do you think you would see?

**Experiment**

Find other materials to observe with a hand lens and microscope. After viewing with a hand lens, **predict** how each material will look under a microscope. Test your predictions.