

Name:..... Date:.....

Nanochemistry

Imagine that you have eyes which can see atoms.

Demonstration: Atomic paper clips

What you do

Watch what happens to the paper clips.

Questions

1. What is the smallest 'particle' in the paper clip pile?

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2. Will one paper clip still work as a paper clip?

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3. Make up names for the two parts of the broken paper clip. What are the names of parts of an atom?

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4. Is the broken paper clip useable? Would a broken up atom be useable?

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5. What is the smallest particle in the metal?

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6. Why can't the metal sheet be torn into the smallest possible particles?

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Nanochemistry

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7. Will the smallest particle in the metal still be made of the metal? Explain your answer.

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8. How could we see the smallest particle in a piece of metal?

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9. Can the smallest particles in metal be broken apart?

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10. Would the broken pieces of metal particles still be metal?

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Note: This resource can be downloaded as part of a collection of activities exploring atoms and nanochemistry (<https://rsc.li/37302Bh>) or for use with a lesson plan on matter, elements and atoms for 11–14 year olds (<https://rsc.li/32yJ6Qu>).