



## Exit Pass: Lesson 4

### What are Physical and Chemical Changes?

#### Questions

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This simulation shows how to tell the difference between acids and bases using pH.

[https://phet.colorado.edu/sims/html/ph-scale-basics/latest/ph-scale-basics\\_en.html](https://phet.colorado.edu/sims/html/ph-scale-basics/latest/ph-scale-basics_en.html)

Use the simulation and the pictures to answer the following questions:



Before



After

1. What kind of change (physical or chemical) do you think happened in the pictures?

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2. Explain what signs you used to decide if a chemical change or a physical change occurred in the picture.

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3. How could you tell for sure that a chemical change occurred?

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4. How might you test the starting substances to see if the reaction was an acid-base reaction?

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5. How might you test to see if the bubbles produced are carbon dioxide?

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