

Unit 7.1

Chemical Reactions (A)

How can we make something new
that was not there before?

STUDENT WORKBOOK



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Name: _____

Date: _____

Part 1: Develop a model showing how the matter in the system (at locations A–D) compare, at a scale smaller than you can see. Use the large circle in the middle to show what you think was happening to this matter that can help explain:

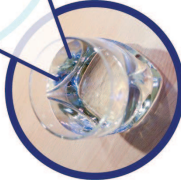
- What happened to the solid bath bomb?
- What caused the gas bubbles to appear?

Before putting these together

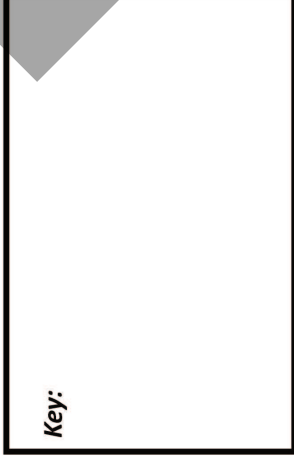
A: A tiny sample of the bath bomb



B: A tiny sample of the water

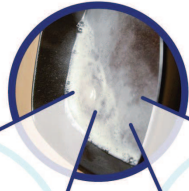


A couple seconds after adding the bath bomb to water



As gas bubbles appear

D: A tiny sample of the gas in a bubble



C: A tiny sample of the liquid left over after a couple of minutes



Part 2:

Now use your model to explain:

- a. What happened to the solid bath bomb?
- b. What caused the gas bubbles to appear?

SAMPLE

Transcript: Homemade Bath Bomb in Water

- 00:09 Homemade bath bombs - the first one is very fragile, so I can't hold it between my fingers; it would break. But it is fairly gritty and it has a slight yellow color. This is bath bomb A.
- 00:54 Bath bomb B can be held. It's slightly off-white and it's also got a gritty texture to it.
- 01:15 Bath bomb C can also be held. It's very white colored. It's the whitest one. Bath bomb B was off-white, bath bomb C is bright white. This one also has a gritty texture and it can be held, so it's pretty firm.
- 01:47 Bath bomb D has similar coloring to bath bomb A - has a yellowish color. It's also gritty in texture.

SAMPLE

Name: _____

Date: _____

What Happens to a Bath Bomb When Put in Water?

Show what you saw happened to the solid bath bomb *and* where the gas bubbles appeared in the system. Use *pictures, symbols, and words* to represent this.

