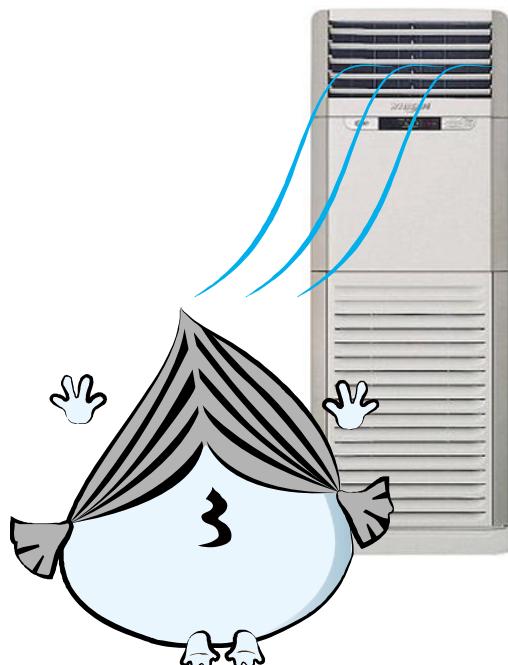
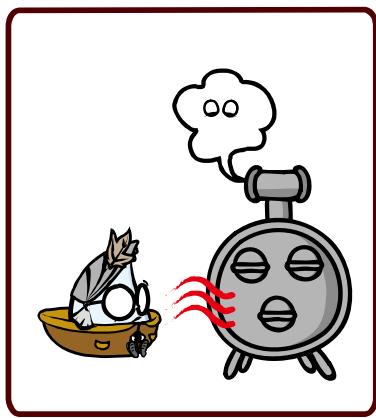
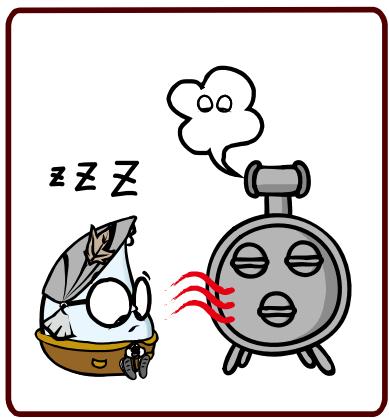
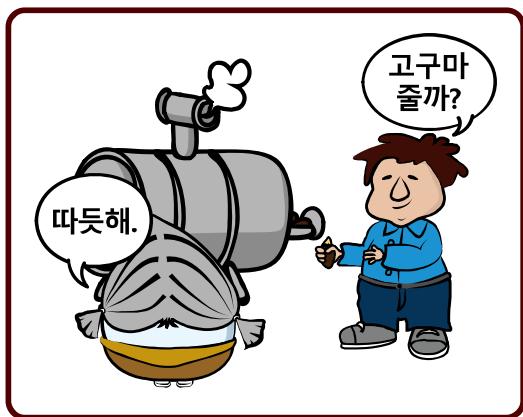
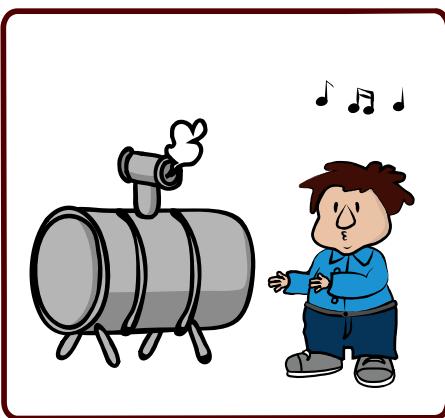
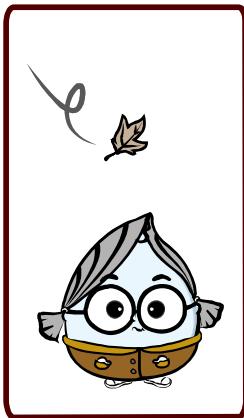
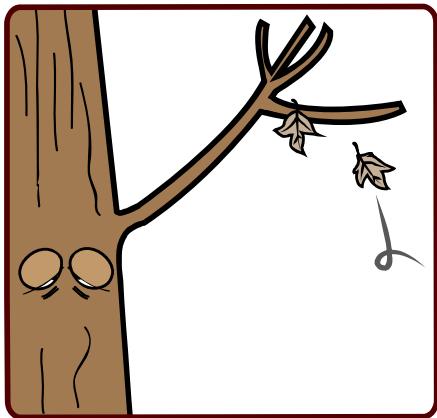
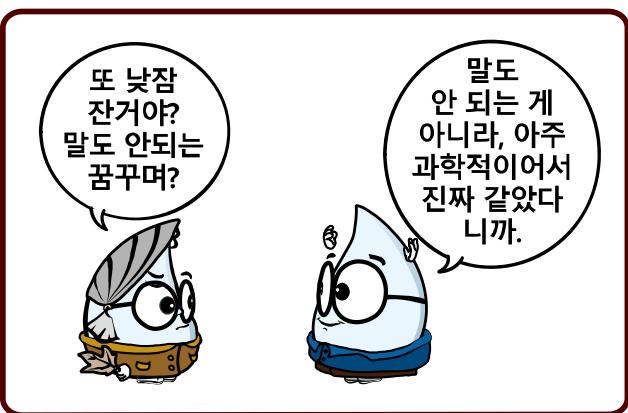
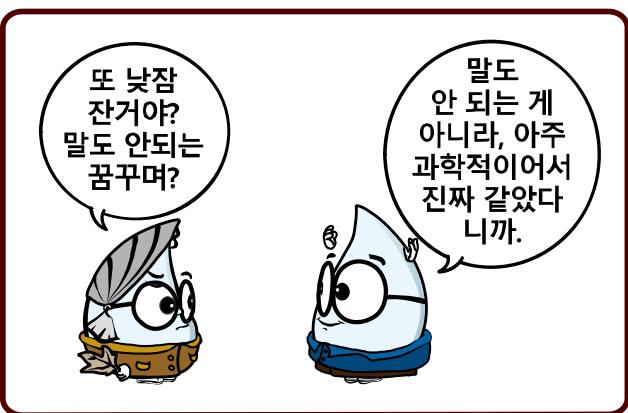
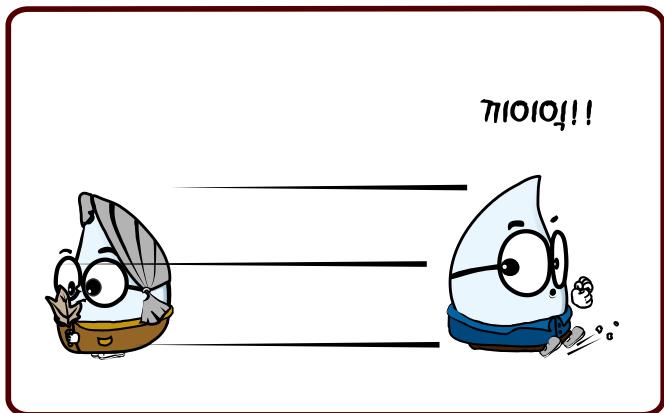
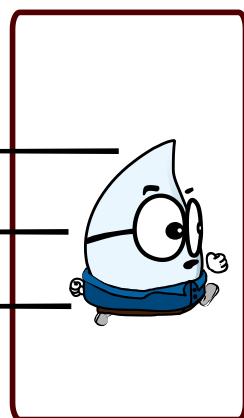
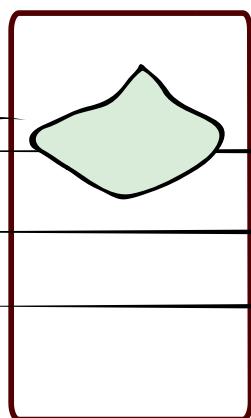
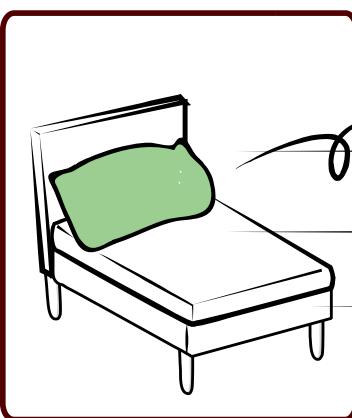
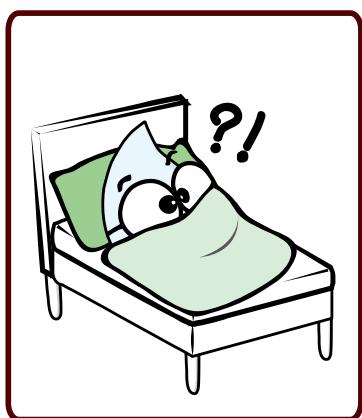
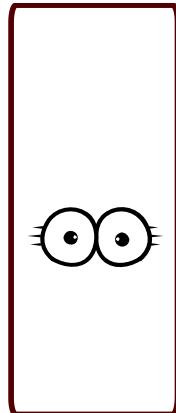
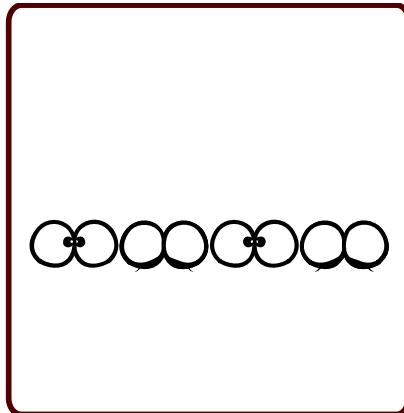
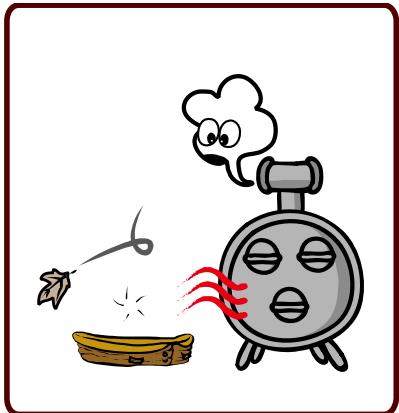


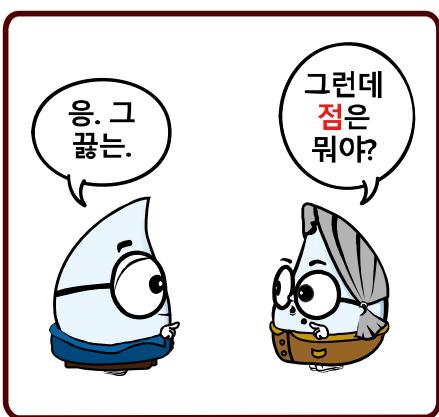
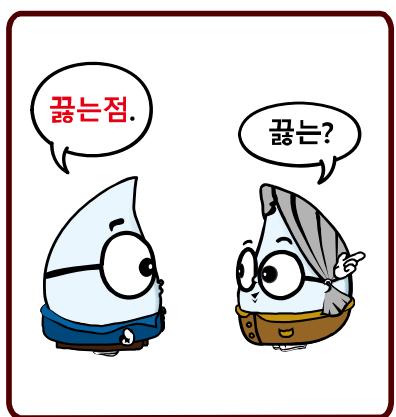
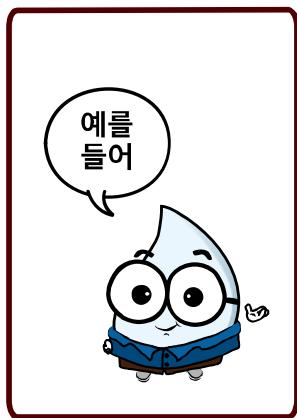
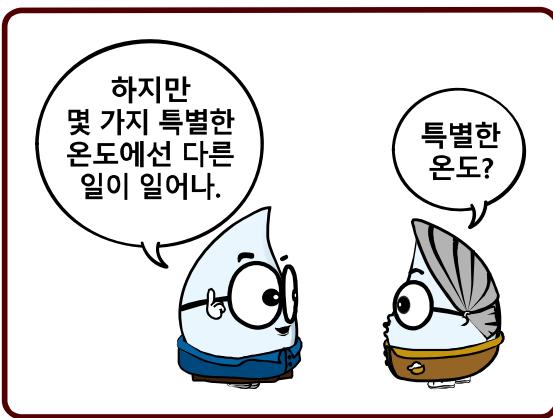
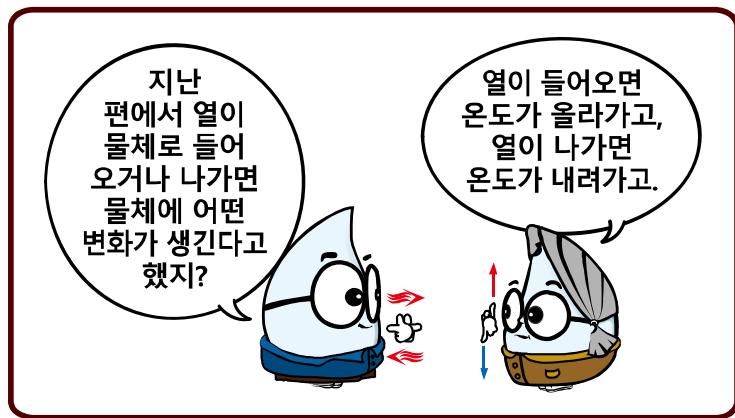
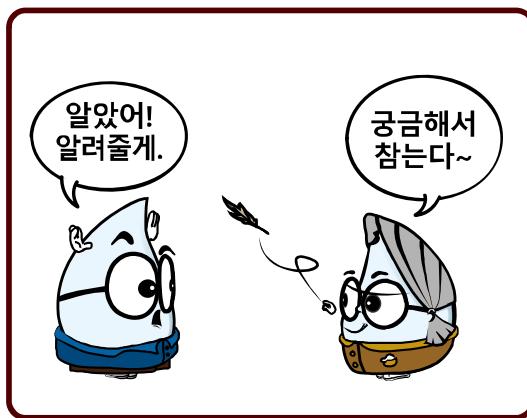
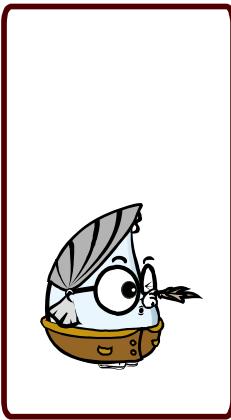
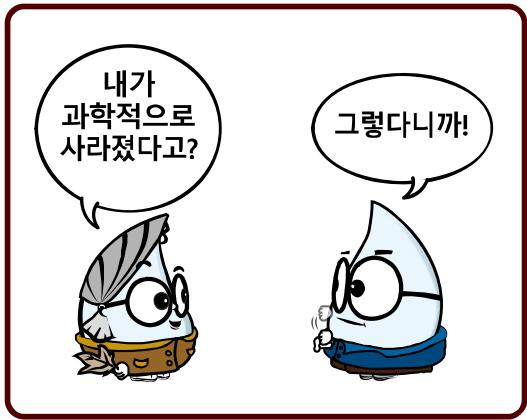
제 7편

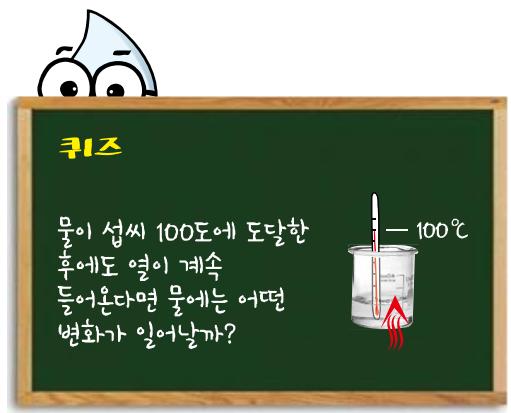
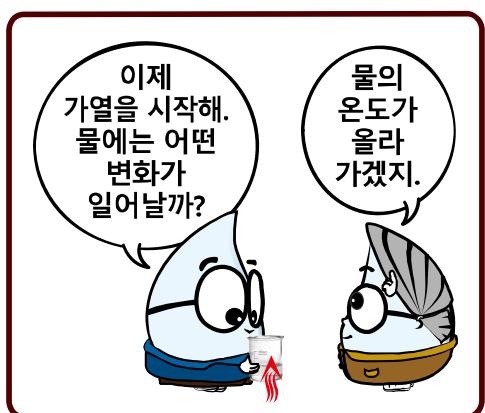
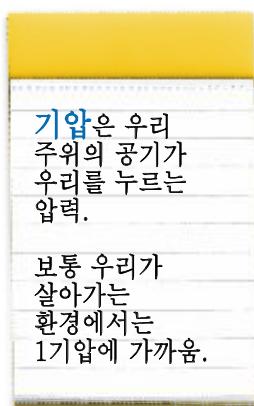
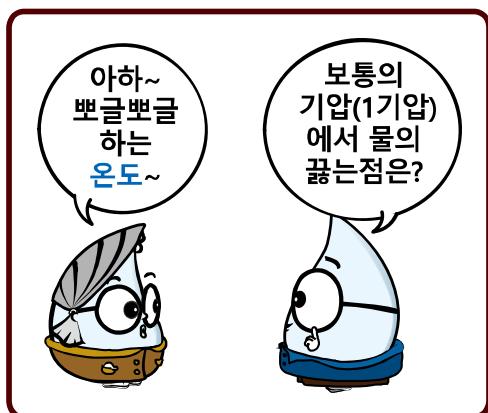
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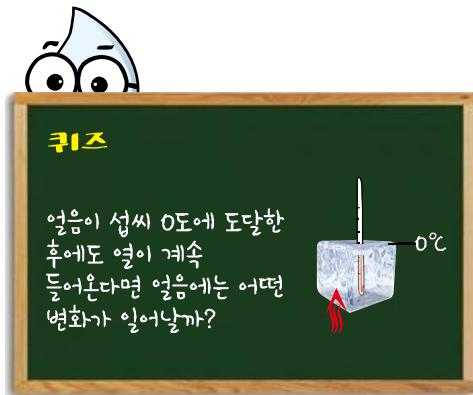
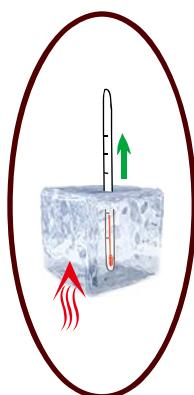
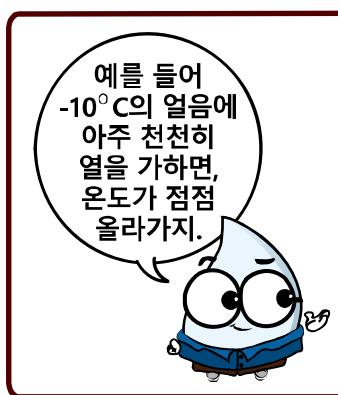
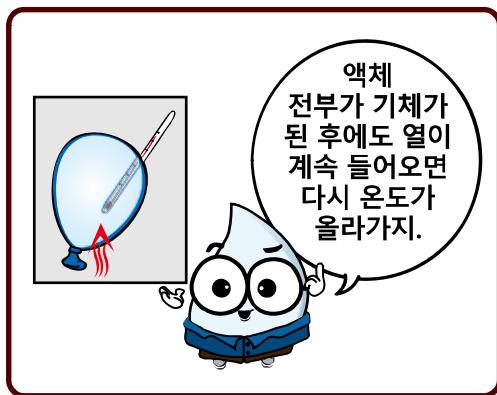
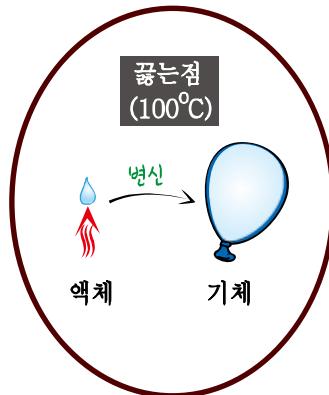
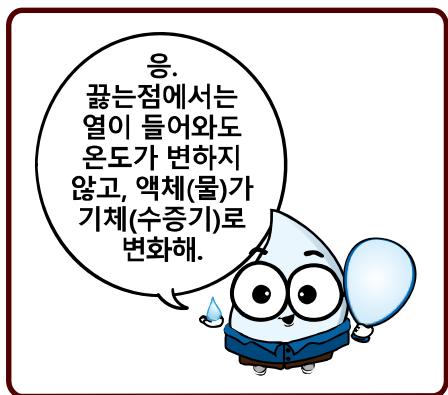
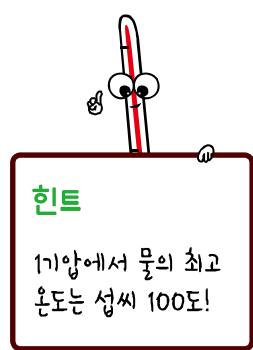


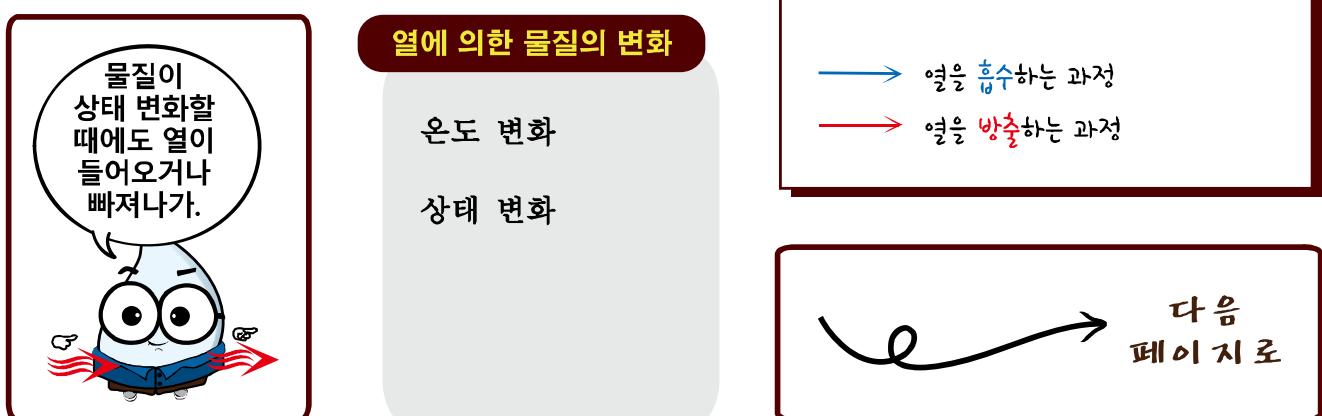
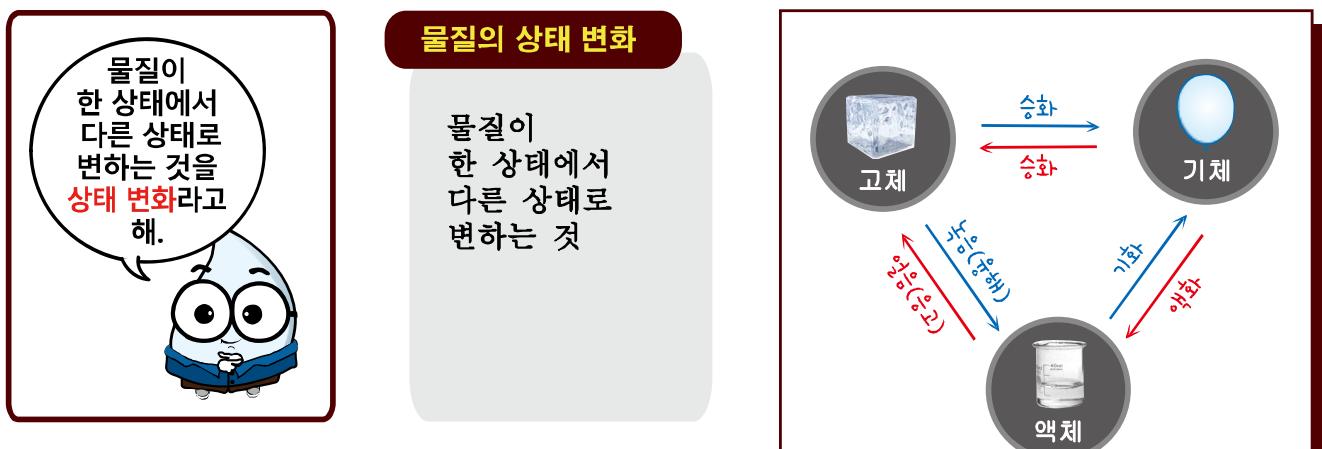






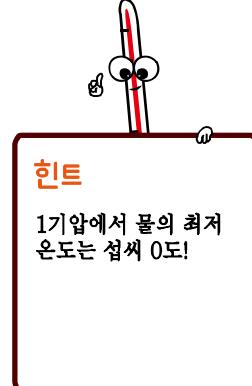
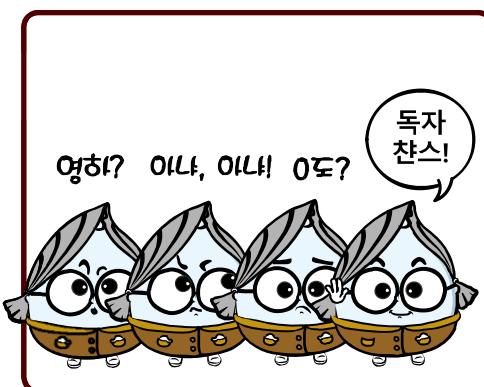
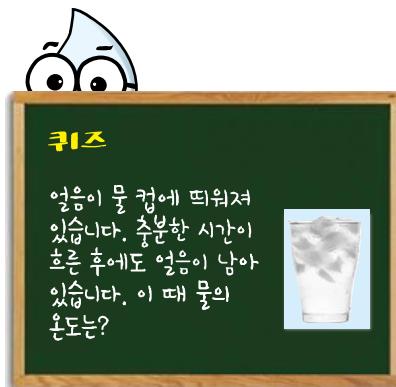
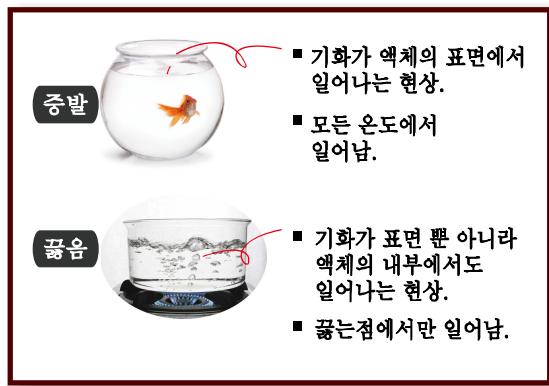
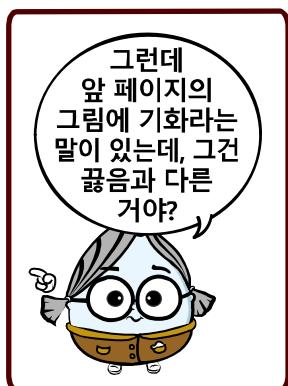
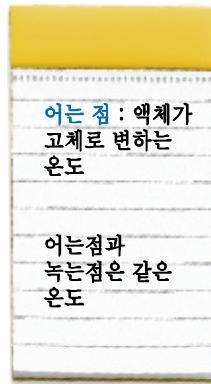
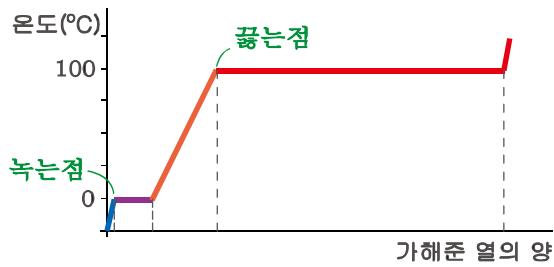




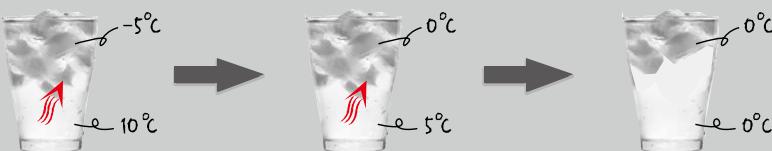




가열 곡선



만약 물의 온도가 0도 보다 높다면



얼음이 물로부터 열을 빼앗아 가서

얼음의 온도가 0도까지 올라간다.
아직도 물의 온도가 0도보다 높다면
얼음이 물로부터 열을 빼앗아 가서

얼음이 녹는다.
언제까지?
물의 온도가 0도가 될 때까지.
이젠 얼음도 물도 0도이므로
열이 더이상 이동하지 않는다.



시간이 흘러도
얼음과 물이 함께
있을 수 있는
온도는 섭씨 0도
뿐이구나.

아하~

얼음물을
섭씨 0도보다
높은 곳에 한참
두면 얼음이
모두 물로
변하고



얼음물을
섭씨 0도보다
낮은 곳에 한참
두면 물이 모두
얼음으로
변하지.



녹는점/어는점
(0°C)



온도가
변할 때와 같이
상태가 변할 때도
열이 들락날락
한다고
했잖아.

상태
변화할 때
들락날락 하는
열은 온도
변화할 때보다
많을 것
같아.

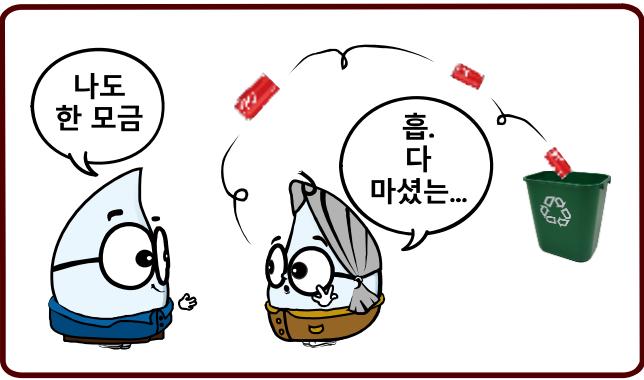
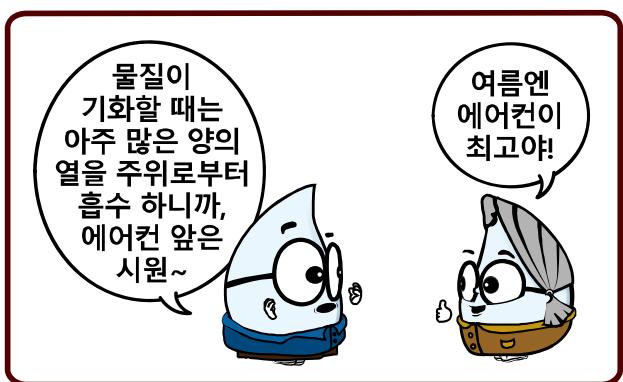
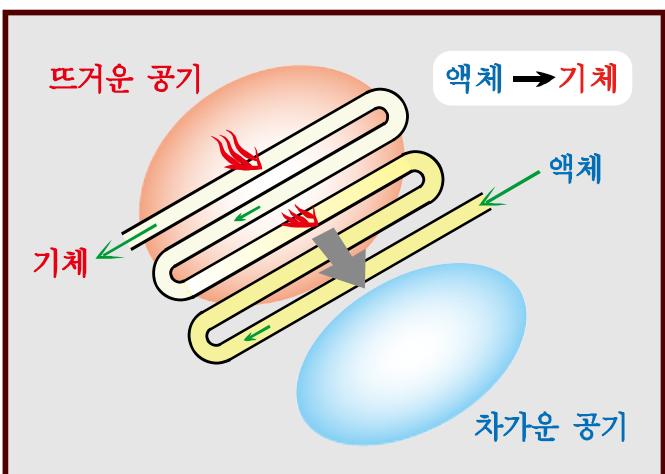
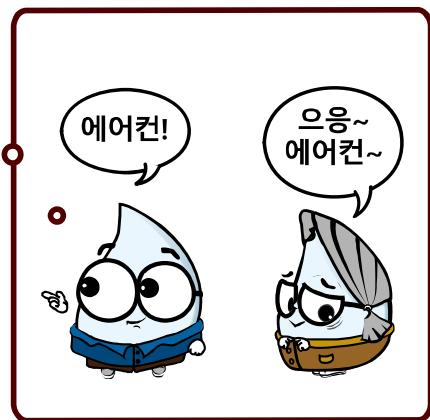
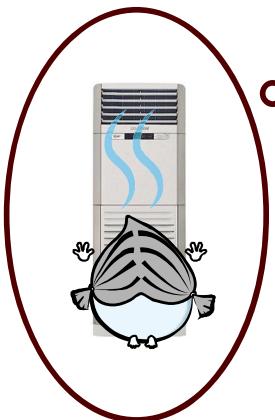
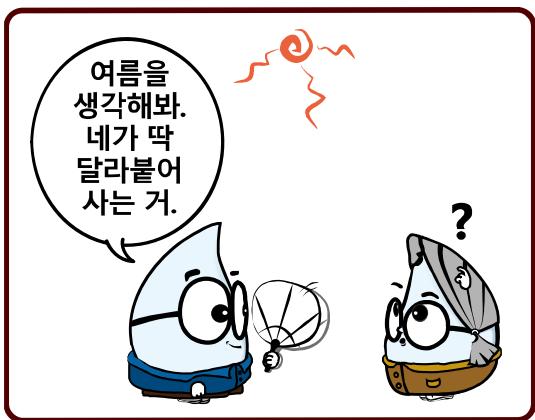
온도
변화보단
상태 변화가
훨씬 큰
변화니까.

물론!
물 1g을 1도
올리는데 비해
얼음 1g을
녹이는 데는 80
배의 열이,

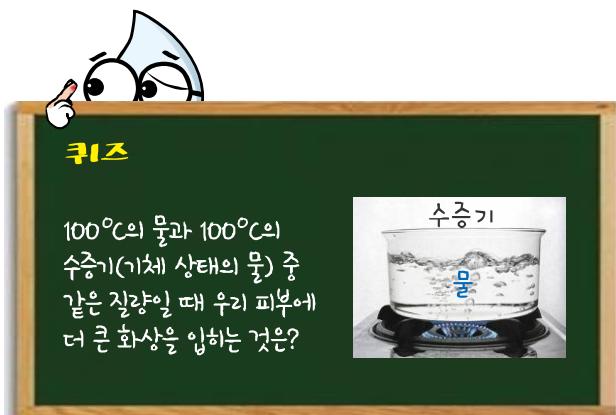
물 1g을
기화시키는
데는 540배의
열이
들어가.

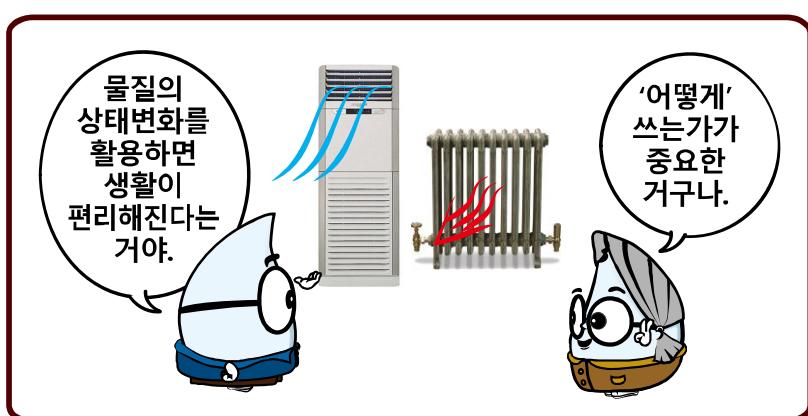
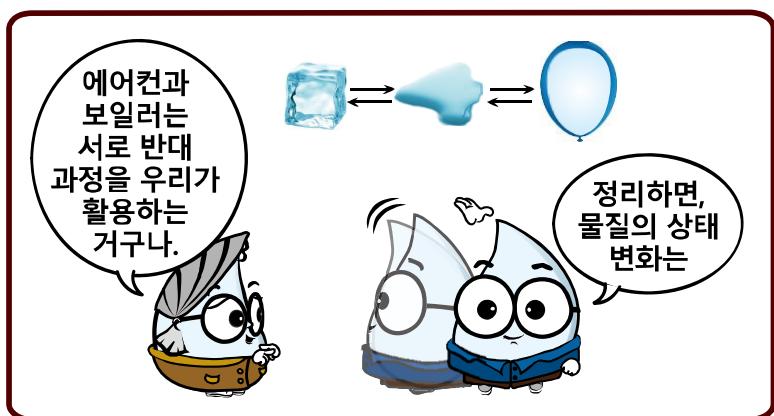
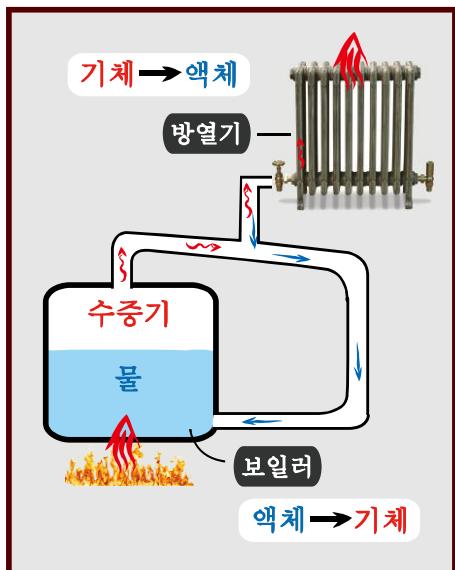
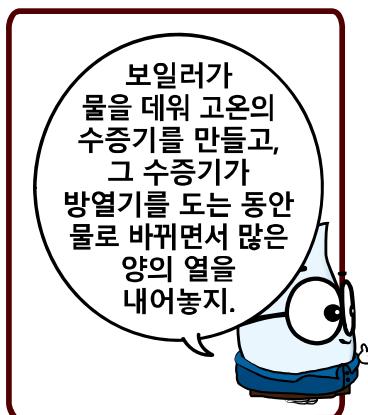
우와!
그렇게
많아?

상태 변화를
이용하면 아주
쓸모있을 것
같은데!









'무엇을 할까' 와
함께
'어떻게 할까' 를
항상 생각하세요.

