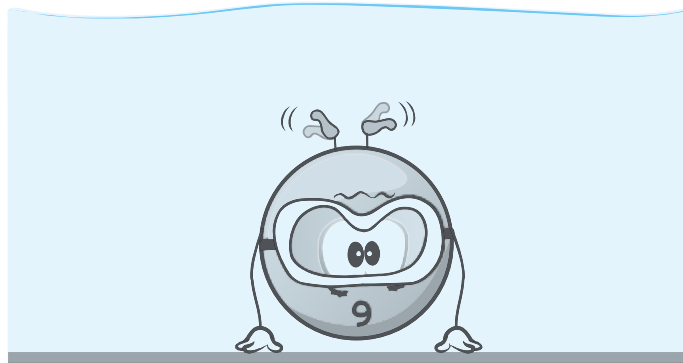
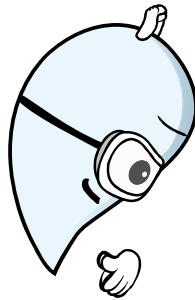
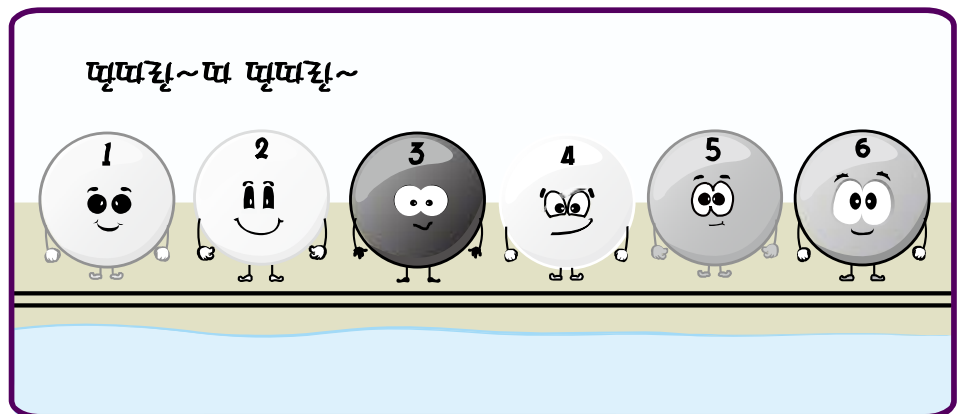
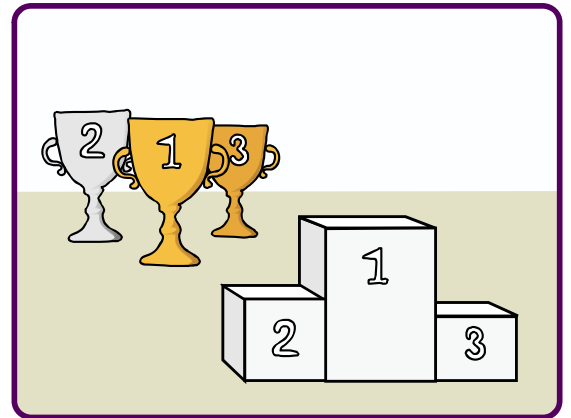
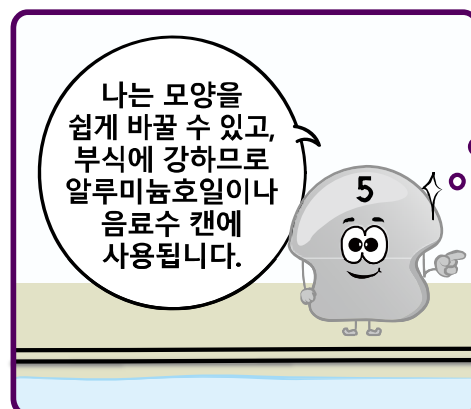
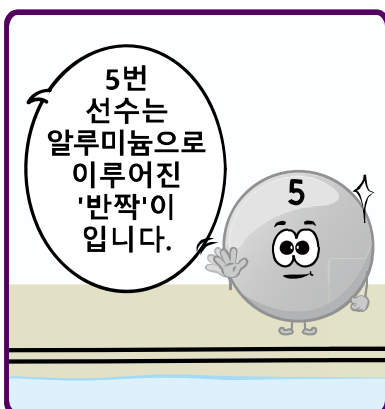
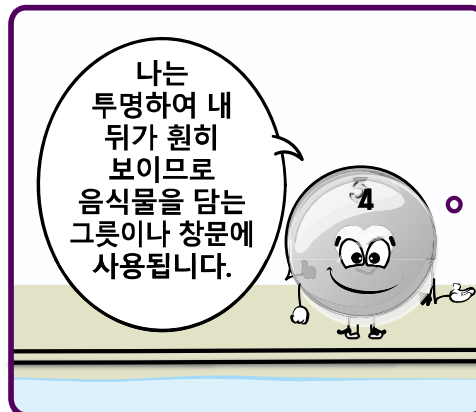
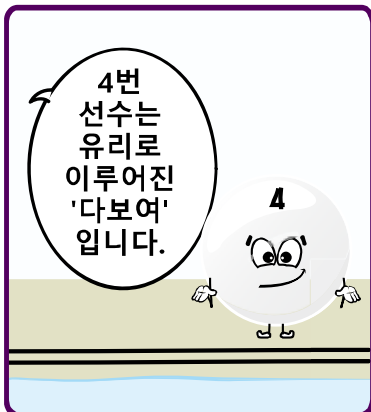
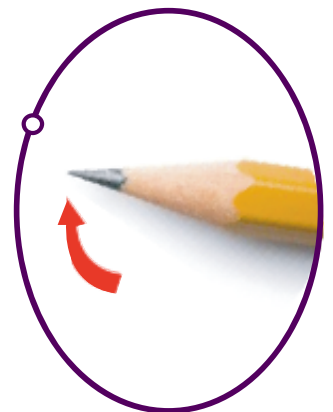
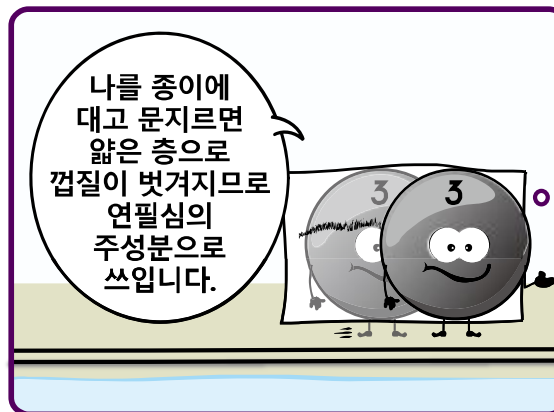
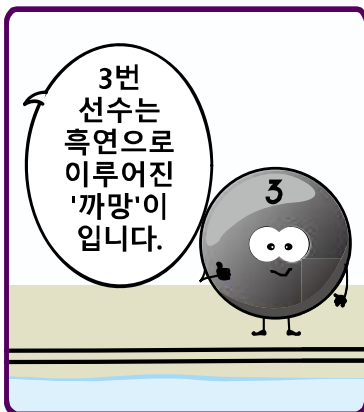
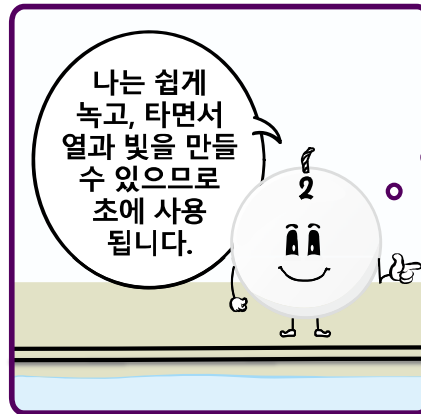
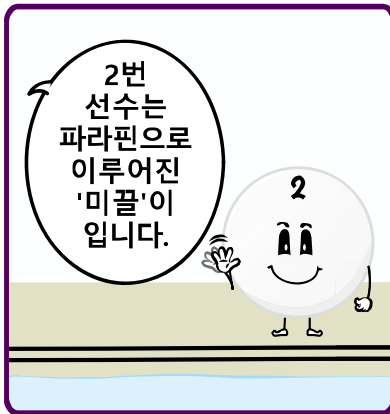


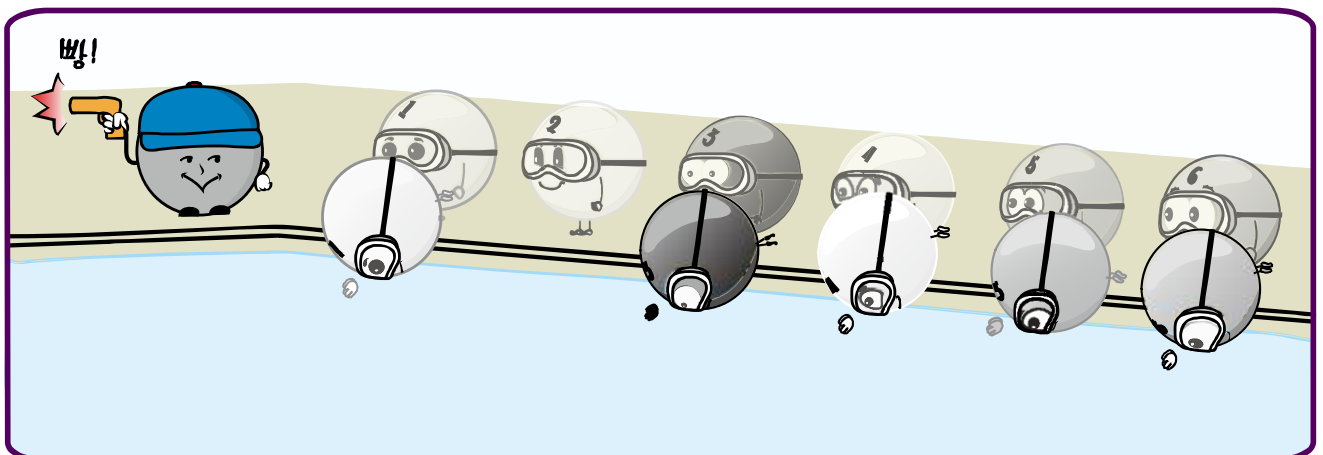
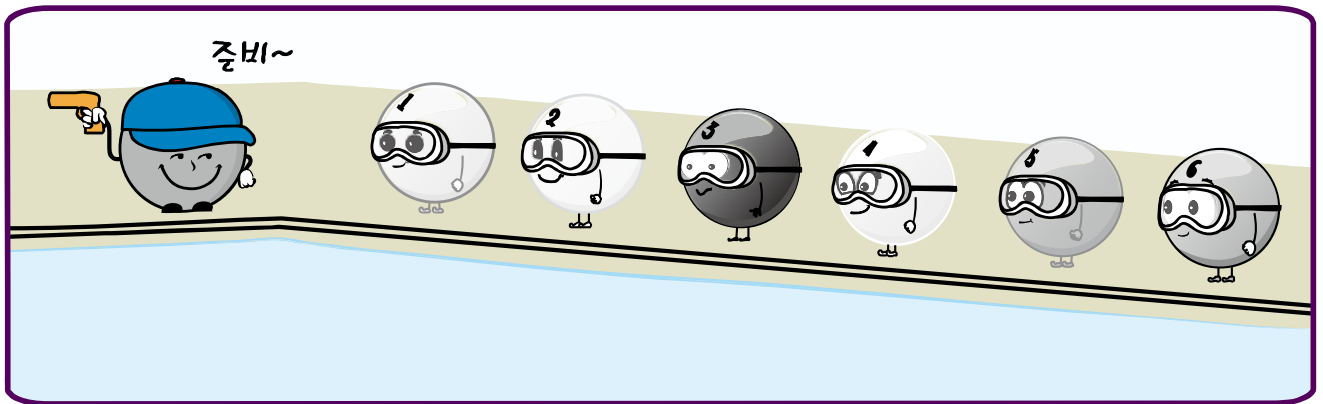
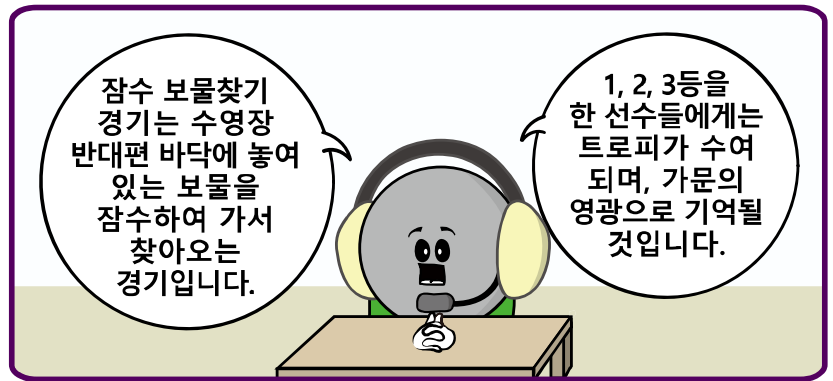
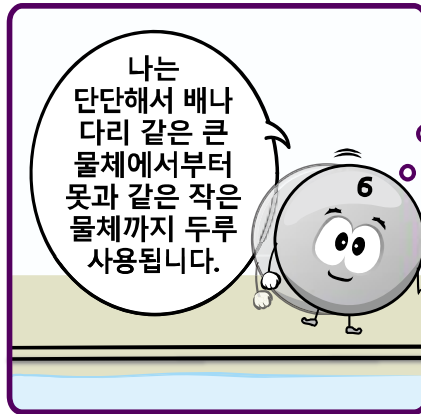
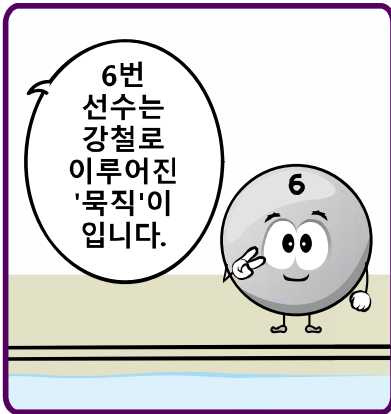
제 4편

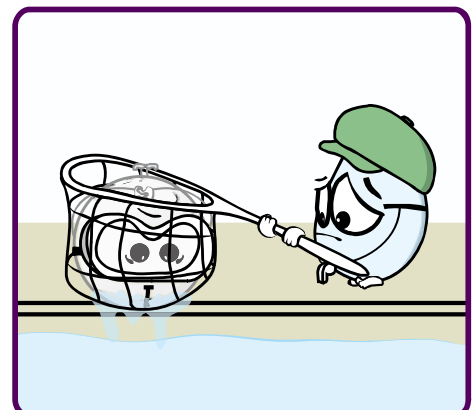
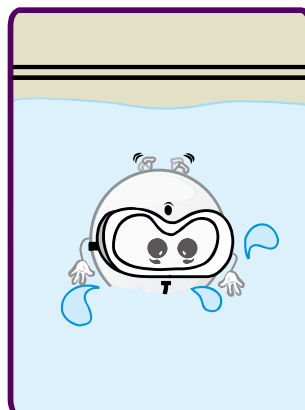
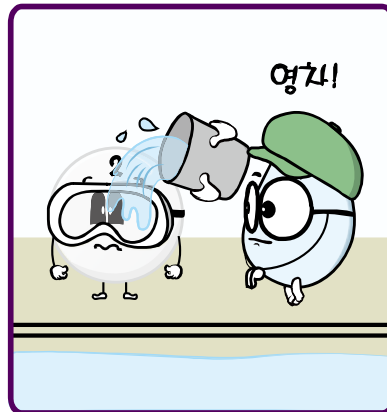
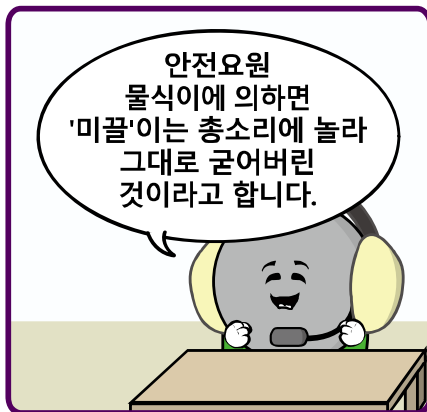
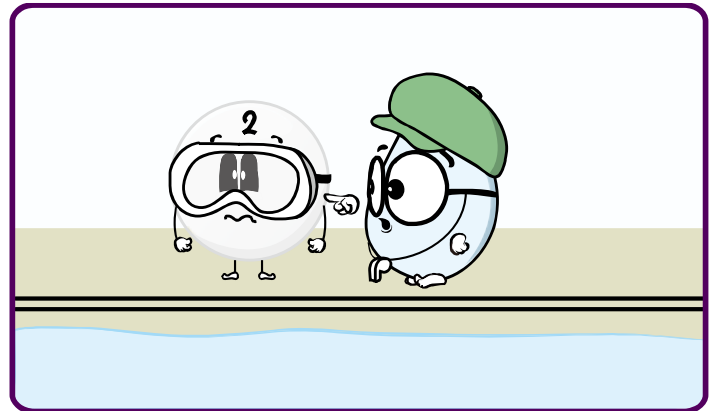
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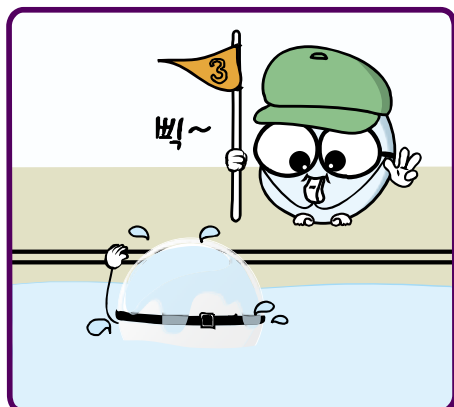
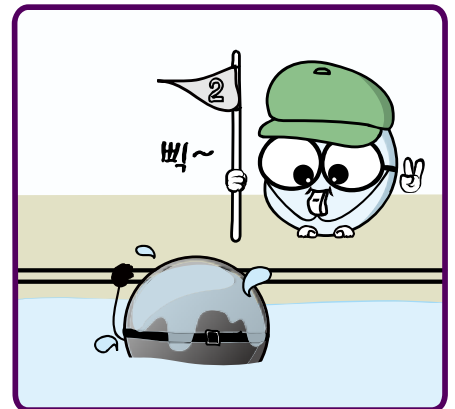
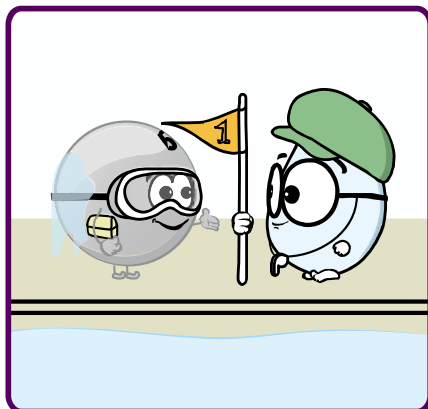
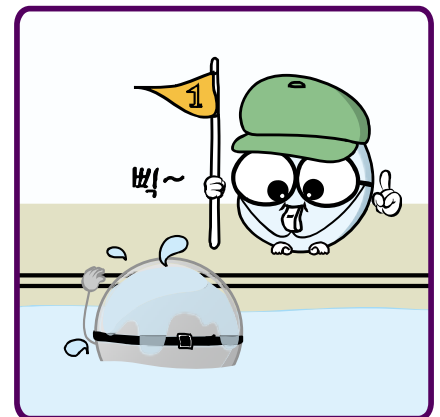
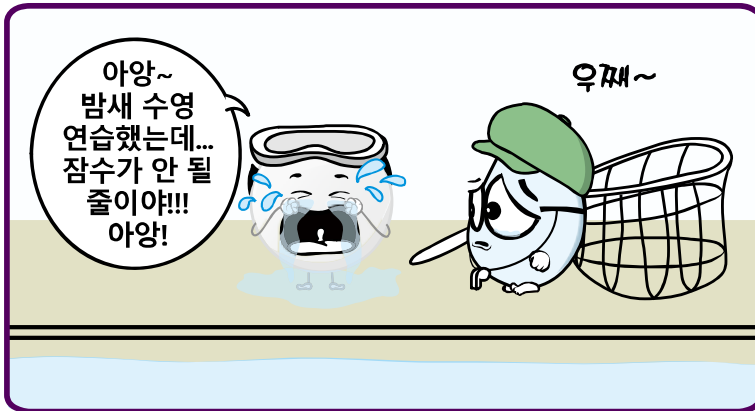


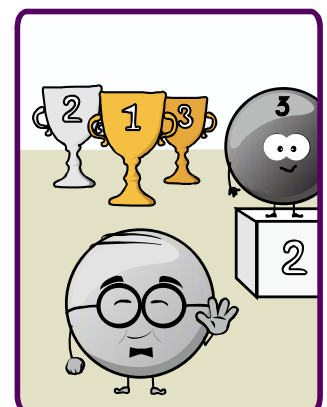
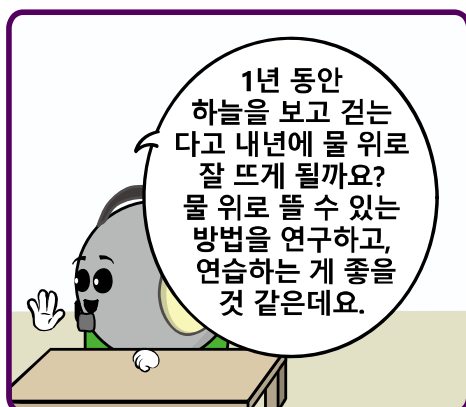
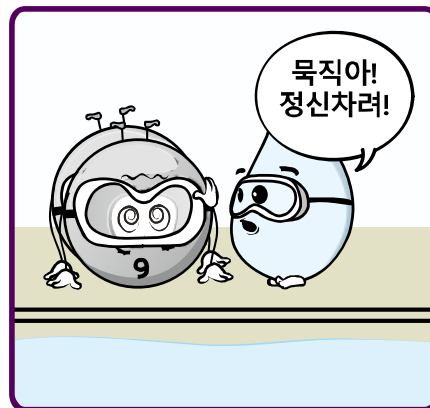
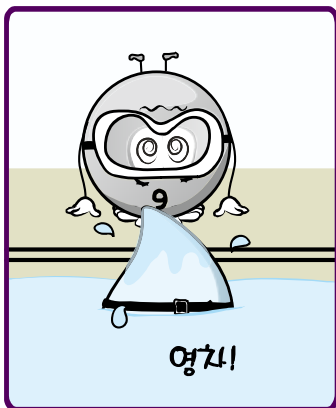
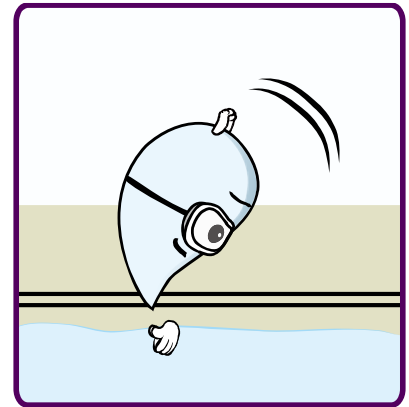


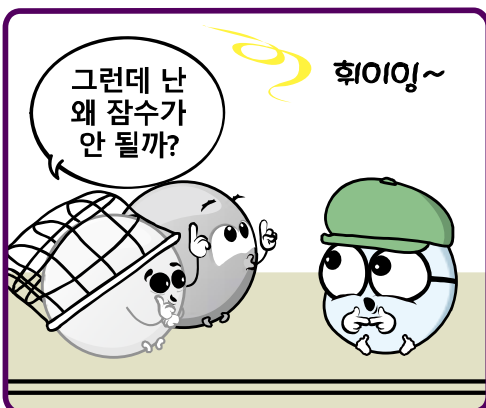
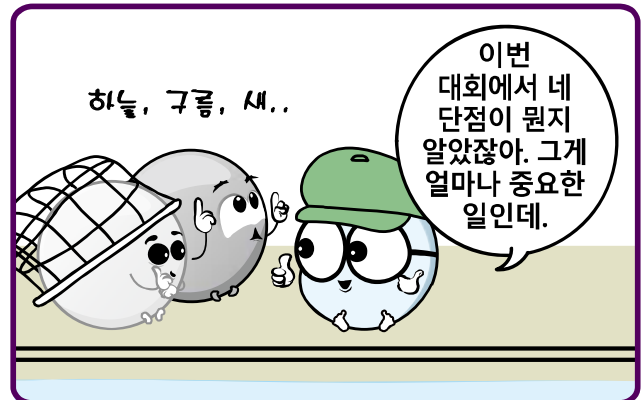
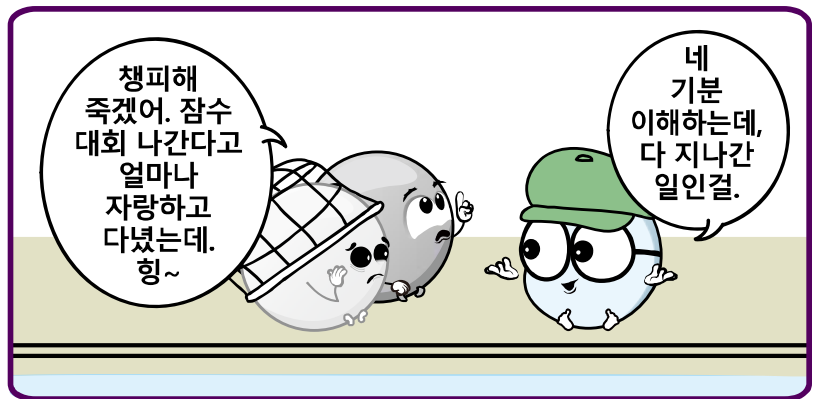
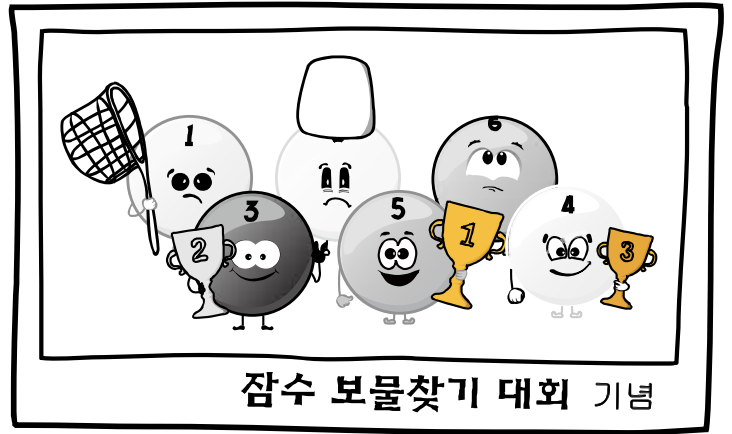
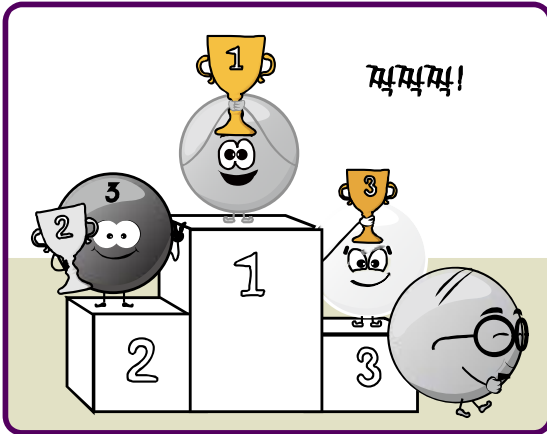


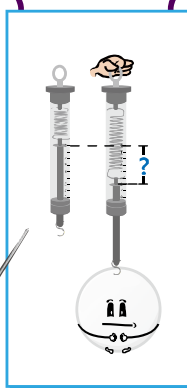
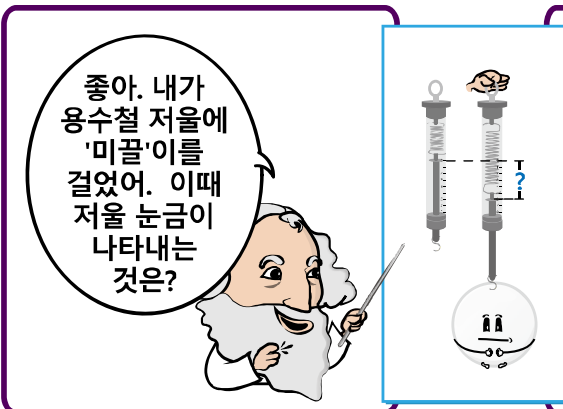
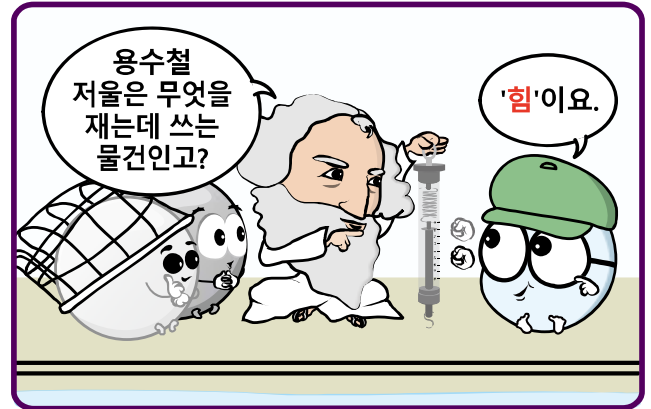




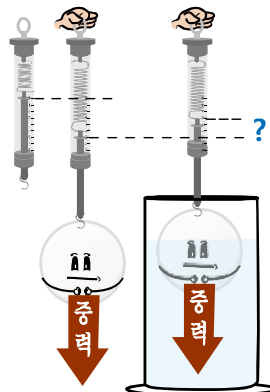








물에 넣은
후 용수철을
아래로 잡아당기는
힘이 작아진
것처럼 보인다는
것은 무슨
뜻일까?



'미끌'이
질량이 그대로니까,
지구가 '미끌'이를
잡아당기는 중력이
작아진 건 아닐
테고.



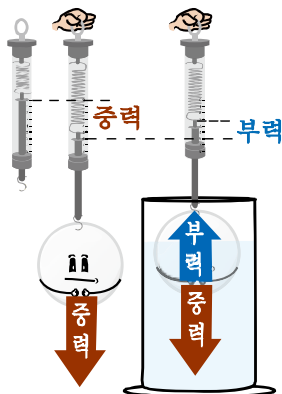
물이
'미끌'이를 위로
들어올리는 것
같아요. 물 안에서는
무거운 물체를
들어올리는 게 쉽게
느껴졌던 기억이
나요.



거봐.
머리를 쓰니까
답이 나오잖아.



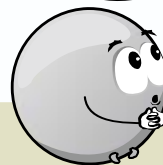
물과
같은 액체에
물체를 담그면,
액체는 물체에
위로 힘을 작용해.
그 힘을
'부력'이라고
부르지.



물체를 더
깊이 담그면 부력은
더 커지지.



그런데
물체가
받는 부력의
크기는 얼마나
되나요?

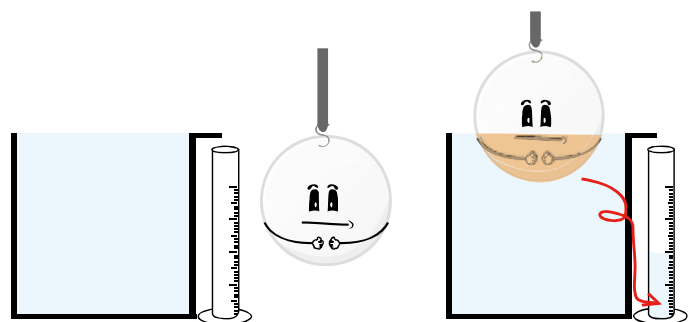


그건
내가 발견한
사실을 먼저
알려 주어야
하는데.



우쭈쭈~

물이
가득찬 그릇에
물체를 담그면,
물체가 물에 잠긴
부피만큼 물이
넘쳐나겠지.

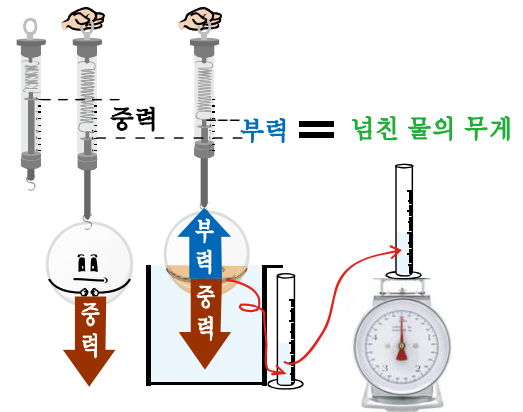


난 그 물에 작용하는 중력 즉, 물의 무게를 잰지.

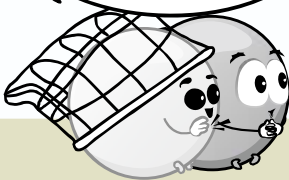


그랬더니!

짜잔~



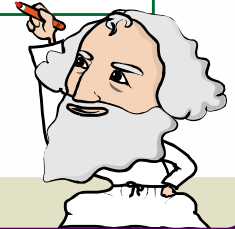
그러니까 물체의 물에 잠긴 부피와 같은 부피의 물의 무게가 바로 물체가 받는 부력의 크기군요.



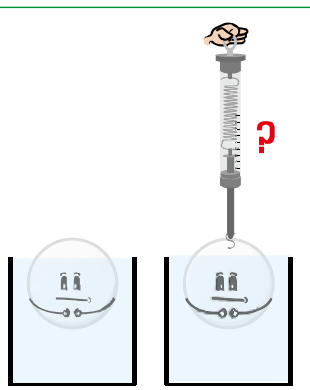
그 사실을 뭐라고 부르는지 알아?



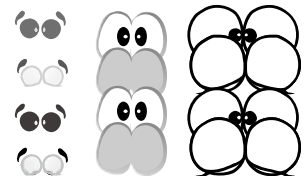
아르키메데스 원리



뽀빠라밤~ 퀴즈! 미끌이를 물에 담그면 머리 끝부분만 물 위로 살짝 나온 상태로 떠. 이때 용수철 저울을 살짝 걸면 눈금은?



이건 주관식이라 찍지도 못하겠네.



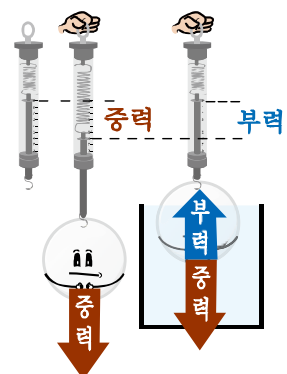
깡머깡머

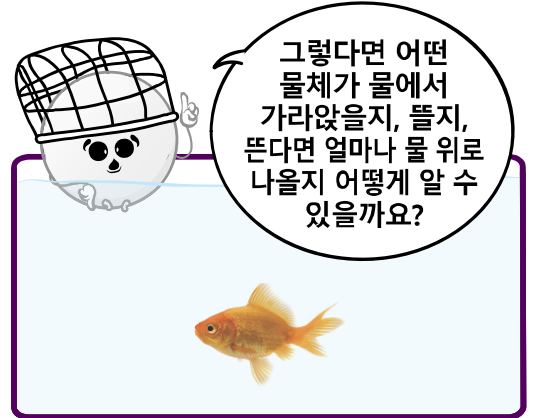
뭐야? 다 포기한 거야? 힌트! 미끌이가 위로 또는 아래로 이동하지 않고 그 자리에 섰으니, 그때의 부력과 중력의 크기를 비교해봐.

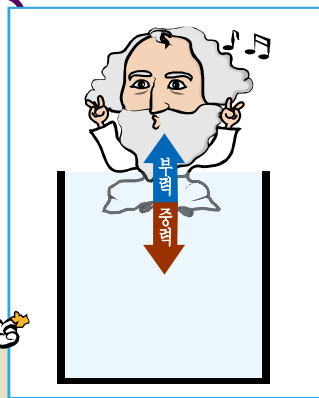


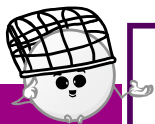
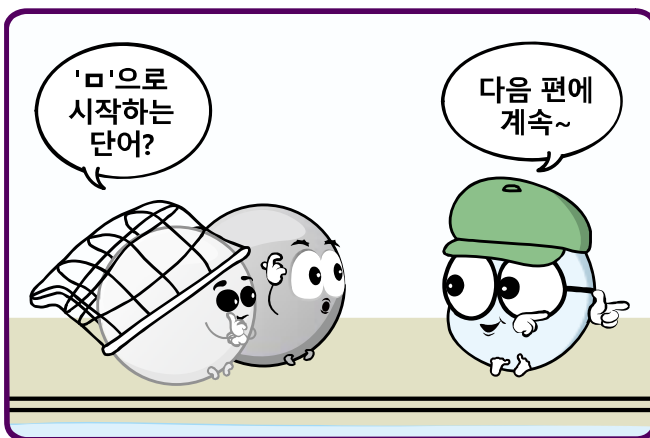
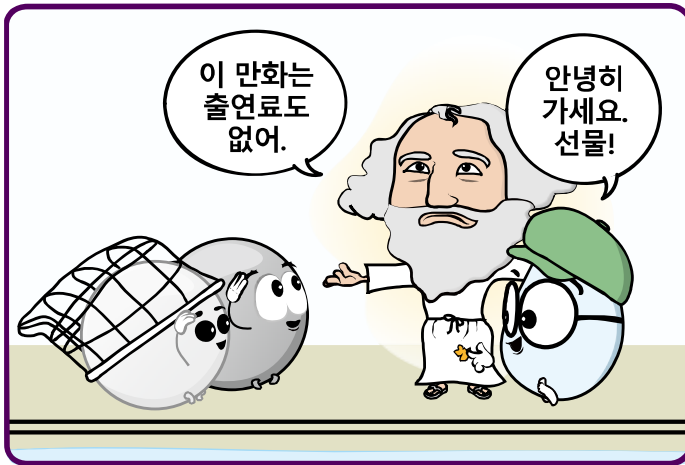
포기 노~

아! 아래로 작용하는 중력과 위로 작용하는 부력의 크기가 같으니까 멈추어 섰 거예요.









이 절에서 알게 된 것을 정리해봅시다.

년 월 일

