

2.4 To Float or Not to Float

Kyle and Sam are hanging out at the park pond on a summer's day. Kyle is skipping stones on the pond.

Sam: You're scaring the geese.

Kyle: Good!...flying poop machines, that's what THEY are. When I cut the neighbors' grass it's disgusting. I can't believe how much poop one goose produces, and then multiply that by 20 or 30 geese and it's totally gross. It takes so long to do one lawn that I'm not making much money.

Sam: So goes the life of our neighborhood entrepreneur.

Kyle: Entre what?

Sam: Entrepreneur, a person who has their own business. That's you, Mr. businessman.

Kyle: Me, a business owner, an entrepreneur? Cool. I thought I was just cutting lawns to make some cash. Why do geese float?

Sam: Huh?!? Where did THAT come from?

Kyle: Well, the rocks I'm throwing sink, right? And I'm thinking I wish the geese would sink, but the geese are much bigger and heavier than those rocks and they float. Why is that?

Sam: Man, you are so random. Does your brain ever stay in one spot for very long?

Kyle: There are a few things...

Sam: Girls...

Kyle: Just one, and she drives me crazy.

Sam: Kai...

Kyle: (interrupting loudly) DON'T say her name!

Sam: She-who-must-not-be-named, huh? Maybe we should talk about floating geese, that would be easier. Packedtogetheridness.

Kyle: Huh?

Sam: The reason geese float. Packedtogetheridness.

Kyle: NOW whose being random? And packedtogetheridness isn't a real word, dude.

Sam: No, it isn't, but as an idea, it answers your question about floating geese and sinking rocks.

Kyle: Packedtogetheridness, huh? What is it?

Sam: Remember when we were talking about what stuff is made of?

Kyle: Yeah, that Greek guy. Democritus's idea of atmos, atoms, was right but the guy who was well

known, Aristotle with four elements, earth, air, fire and water, was wrong but everyone believed him.

Sam: Well, Mr. Articulate, yeah, sort of. Floating and sinking has to do with atoms and how packed together they are.

Kyle: Ah! So that's where you got packedtogetheridness. But I still don't understand it.

Sam: That's OK, we'll work on it. Understanding things, especially complicated things, takes time. It's unrealistic to think you're going to get it on the first try. So many people are like that these days. If they don't get it the first time, they give up. Its not the easy things, but the hard things that are worth doing. And then you'll be smarter for your effort. So don't give up, Bro.

Kyle: And packedtogetheridness? Since it's not a real word, what does it mean?

Sam: OK. Think of an elevator.

Kyle: Wow. Ok.

Sam: While the elevator is empty, throw a beach ball into it up towards the ceiling. Where does it go?

Kyle: Duh! Thud!...straight down to the floor.

Sam: Exactly. Now put three people in the elevator and throw the beach ball in again.

Kyle: Thud again. The ball falls to the floor.

Sam: Now put five people in.

Kyle: The ball bounces off a few of them but still ends up on the floor.

Sam: Now imagine the elevator packed with people. NOW throw the beach ball toward the ceiling. Where does it end up?

Kyle: It ends up sitting on top of the peoples' shoulders. Wait! I get it! When we pack more people into the elevator we get to a point where there is no room for the people to move out of the way of the ball, so they end up holding it up. Packedtogetheridness! I get it!

Sam: Now, throw a bowling ball up into the packed elevator.

Kyle: Ouch! Those elevator folks will certainly find room to move out of the way of THAT!

Sam: The rock is more packed together than water so the water moves out of the way and it sinks. The geese are less packed together than water so they float.

Kyle: Excellent! I get it! I wonder if these geese would taste good. Hmmm.

Sam: Mr. Entrepreneur gets another business idea. Roast goose. Hmmm. That does sound tasty.

