

GERMINATION

We've finished the plant unit in biology. Ms. Keen drops ten-pound hints that the test will focus on seeds. I study.

How seeds get planted: This is actually cool. Some plants spit their seeds into the wind. Others make seeds yummy enough

for birds to eat, so they get pooped out on passing cars. Plants make way more seeds than they need, because they know that life is not perfect and all the seeds won't make it. Kind of smart, when you think about it. People used to do that, too—have twelve or fifteen kids because they figured some would die, some would turn out rotten, and a couple would be hard-working, honest farmers. Who knew how to plant seeds.

What seeds need to germinate: Seeds are inefficient. If the seed is planted too deep, it doesn't warm up at the right time. Plant it too close to the surface and a crow eats it. Too much rain and the seed molds. Not enough rain and it never gets started. Even if it does manage to sprout, it can be choked by weeds, rooted up by a dog, mashed by a soccer ball, or asphyxiated by car exhaust.

It's amazing anything survives.

How plants grow: Quickly. Most plants grow fast and die young. People get seventy years, a bean plant gets four months, maybe five. Once the itty-bitty baby plant peeks out of the ground, it sprouts leaves, so it can absorb more sun. Then it sleeps, eats, and sunbathes until it's ready to flower—a teenage plant. This is a bad time to be a rose or a zinnia or a marigold, because people attack with scissors and cut off what's pretty. But plants are cool. If the rose is picked, the plant grows another one. It needs to bloom to produce more seeds.

I am going to ace this test.