Impact 3
Unit 5
Main Video Script
Scene 5.1: *Flight of the RoboBee*

Narrator: This is Robert Wood. He loves robots.

Robert: So I want to begin with a bold statement that robotics is the next internet. It's the next big thing to impact our lives in areas from medicine to even things like space exploration. The more traditional view of robotics is big, rigid, very powerful, very dangerous, but in this case we're making things smaller, perhaps faster, certainly cheaper than more traditional robotic systems. We are constructing robots the size of insects. We use nature to inspire the robots that we build. This is of a carpenter bee. As an engineer, I can look at this and start to ask some really well-posed questions like, "how are the wings moving?" Our team is working on creating a colony of autonomous robotic bees. We envision that, 20 or so years down the road, when these things actually exist, they could be quite useful for applications where you wouldn't want to put a human or an animal—hazardous environment exploration, search and rescue, space exploration, assisted agriculture. There's all these really interesting open questions that must be solved if you're going to achieve this goal. We have to build everything from scratch. How many RoboBees have we crashed? All of them! We build, we test. We build, we test. If you don't fail, you don't learn enough. For every thing that works, there's tens or hundreds of things that don't. Now you have this concept where you have not just one all-capable robot, but you have a bunch of not very good robots. The idea is that the whole is greater than the sum of the parts.

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