Comparing and Contrasting our Deconstructed Materials

As we continue deconstructing the various pieces that have been donated to our classroom, the children have made observations and developed hypotheses and vocabulary to explain or define what they see. As they begin to take apart more and more machines, they have noticed similarities and differences, allowing them to then predict what they will find in the next one. This scientific exploration has furthered their ability to test a hypothesis and build definitions and understandings through collaboration.

Jasper: *I think there's going to be the green things.*
James: *I think there's going to be a CD. How are we going to deconstruct this big thing?*
Jasper: *There's screws.*
James: *We need the phillips head.*
Jasper: *There's a piece that was moving when I took out the screw. We need to put the machine on its side so we can get out the screws from the bottom.*

How do you think all of these screws get put in?

James: *With screwdrivers, people do it and they use screwdrivers. Now we're messing up their hard work.*

James: *25 screws were holding the DVD player together. Whoa! There's a fan! I think it's to blow the sound out.*

The children decided to show the class what they'd found in the DVD player and moved on to deconstructing a laptop computer.

James: *There's lots of parts of a computer.*
Jasper: *There's a keyboard.*
James: *There's a fan too!*
We then shared this work and the children’s observations with the whole class during our Reflection Meeting.

Jacob: Well what I’ve been taking apart at home, the machines that I don’t use anymore, I noticed that they were similar to that one, it had a lot of fans, screws and wires and stuff.

Miles: I’m gonna add to Jacob’s idea. It is similar that there are buttons holding it together and there are wires.

Gabi: I like that maybe there’s doors inside the deconstructing.

Jasper: What’s this?

Tallulah: In a lot of them there’s spikes.

Ruby: There are a lot of gears and things on the board that’s green.

Miles: The green board look like the whole city and the white lines that look s like the trains.

Anthony: There are some lines that combine. There’s something that goes up and down.

Jacob mentioned fans, what do you think the fans are for?

Zoe: Fans could be used to make it work. To make light to watch a movie.

Ruby: I want to add to Zoe. The fan is to show the light to make the gears more for the movie. Gears spin and they have little corners. They are circles.

Hal: But how could the fan even move with air? If it’s right over here, how did it stick. Actually, I think there were screws. I wonder how it can connect way over here. It’s connected with wires. What is the fan for? Maybe if something is playing, air comes in, and it blows it out with the fan.

Max: I have another way the fan can spin. The wires make the fan go.

Why might it want to blow air out of the machine?

Anthony: Because fans blow air out.

Zac: If we press buttons the air goes out.

Hal: Maybe it gets full of air and it has to get it out, instead of just blowing.

Miles: When a machine is on, it is warm when you touch it.

Ruby: When I touch a TV, it’s warm when it’s on.

Hal: When everything is on, it’s warm. If it gets all full of air and it gets too much hot air and it blows it out. It needs the fan to blow some of the air out.