

## Transcript for Video Clip 2.1

Teacher/video ID:	Kawamura, 2.1_stella_GEN_kawamura_pre_tiernan_c1
Content area:	Genetics
STeLLA strategy:	Ask questions to elicit student ideas and predictions (STL strategy 1). Ask questions to probe student ideas and predictions (STL strategy 2).
Context:	In this preinterview, a student looks at images of three generations of people and discusses his understanding of traits as they relate to dominant genes.

### Video Clip 1

Time Code	Speaker	Discussion
0:00:00.9	T	So OK, so you said Julia ... maybe her orange hair was dominant over [Thomas's]. But then Angelie's dark hair was dominant over Edward's orange hair.
0:00:12.9	T	So here, orange hair was dominant. Here, it wasn't. So how do you explain that?
0:00:21.1	SN	Uh ...
0:00:21.6	T	Why wouldn't this ... if this was orange hair ... [be] dominant over that ... Why wouldn't this orange hair be dominant over that?
0:00:28.7	S	Well, it might be because it's an orange ha ... oran ... I think genes also kind of de ... Like, all genes have a gender. Like, since I'm a boy, I guess all of my genes are technically boys.
0:00:45.6	T	Uh-huh.
0:00:46.1	S	So it might be, like, girl orange hair is more dominant over boy brown hair. But girl brown hair is more dominant over— Well, girl black hair is more dominant over boy orange hair.
0:00:57.3	T	OK, OK. Cool.
0:01:01.1	T	So if you know what two parents look like, can you say for sure what their kids will look like?
0:01:10.0	S	Not necessarily, because ...
0:01:11.8	T	Why?
0:01:12.6	S	Because you'll never know if, like, sometimes, like, sometimes the parents can both have brown hair, but then their child ends up having orange hair.
0:01:25.2	T	Oh, how's that happen?
0:01:25.8	S	Like, maybe it's, like, the combination of the two.
0:01:31.7	T	So they—
0:01:32.0	S	I guess kind of like two of the same, like, too much of the same can't be good or something like that, you know.
0:01:42.6	T	So they had two brown-haired parents, but they could have an orange-haired—
0:01:46.9	S	Child, uh-huh. There's, like, a small possibility of it.
0:01:50.4	T	Yeah. Actually, that happened to me.

0:01:54.0	S	Like—
0:01:54.4	T	I had a re ... an orange-haired kid. And I don't have orange hair, and neither does my husband.
0:02:00.1	S	Yeah, like, I know a friend of mine has brown hair, but both of her parents have blond hair. But it might also depend on, like, generations above.
0:02:11.6	T	OK. Talk about that a little.
0:02:13.6	S	Because my friend ... has blond hair, but both of her parents have brown. Her great-grandpa also has blond hair, and so that might've affected her.
0:02:23.8	T	OK, and does that have anything to do with genes?
0:02:26.4	S	Yeah, like the ... I'm saying that both genes go into the person—
0:02:31.7	T	Uh-huh.
0:02:32.0	S	But one gene shows up more.
0:02:35.0	T	Uh-huh.
0:02:35.6	S	So, like, he could still have Edward's orange-hair gene, so it ... he could ... he ... There's a possibility of him having an orange-haired child.
0:02:44.8	T	OK. Got it.
0:02:50.9	T	So, like, if a baby, like a mother is pregnant, you know, she's having a baby, and he's growing in the womb, how does that baby ...
0:03:01.8	T	how does it know what color hair to have, or what ... how ... you know, how tall or short to be? Is it the genes?
0:03:13.0	S	It's really the genes. I imagine it ... it sounds kind of funky and far-fetched, but I imagine it as the genes, like, get into a wrestling match or something; like they fight over it.
0:03:26.2	T	Uh-huh.
0:03:26.6	S	And then the one that wins is more dominant, and then the other one is weaker, so it's kind of like a ...
0:03:33.4	T	Uh-huh.
0:03:33.8	S	bigger one and a smaller one.
0:03:36.0	T	So which genes are fighting?
0:03:39.3	S	Like, the hair gene ... the two hair genes would fight [and] the two skin-color genes would fight.
0:03:43.4	T	Do you mean, like, one from the father and one from the mother?
0:03:45.6	S	Yeah.
0:03:46.1	T	Got it. OK. That's an interesting image of the fighting genes.