

Science Lesson on Balance  
Part 2 – Investigating and Writing  
Teacher: Lorena Reyes  
Video URL: <http://goo.gl/q363D>

Abbreviations:

T = Teacher

S = Student

Ss = Whole class or more than one student

Time code: [minute: seconds]

- 1 Ss:[Students talking]  
2 [00:00:24]  
3 Group 1  
4 S: Ms. Reyes! It's so easy! Easy-peasy.  
5 [00:00:39]  
6 T: Can you show me if it works?  
7 [00:00:44]  
8 T: Was it doing that a moment ago? When you had it right there?  
9 Ss: [students talking among themselves]  
10 T: Hold on. You can talk to your peers.  
11 [00:01:14]  
12 T: Can everybody give me their attention for a moment?  
13 Ss: Yes!  
14 T: Scientists share their findings with their colleagues, okay? In this case, your peers are your  
15 colleagues. You're working and investigating and learning together. So, I can't be with  
16 everybody at the same time, so you can start sharing with your partner, like, "look at my  
17 crayfish, I just balanced it on my finger," right? You could be talking to each other. So I  
18 encourage you to do that, okay? While I get around to each table. Did you understand?  
19 S: Look, I'm balanced.  
20 [00:01:46]  
21 Ss: Yes. [students resume work]  
22 T: Alright, I have a question for everybody.  
23 S: Okay.  
24 T: And I want you to think in—think first. Think before you even try. Think. So put your  
25 crayfish down for a moment. Give me a minute. I want you to think, before you even do it, if I  
26 were to put my finger here, would it balance? Think. Think!  
27 S: No.  
28 [00:02:30]  
29 T: And now we need to start thinking as to why. Another question! If I were to put my finger  
30 here, would it balance? And why? Another question: if I were to put my finger, would it  
31 balance? Why? If I were to put my finger here, would it balance? Why? If I were to put my  
32 finger here, would it balance? Why? So, start investigating.

33 Ss: *[students talking among themselves]* We can share with a partner...I know because...I think  
 34 they're balancing a little.  
 35 [00:03:09]  
 36 T: You think, they're balancing a little? Why do you say that?  
 37 S: Because I saw like this (...). And then— (...)  
 38 T: Great, but try to use um, one finger,(...). Would it be the same?  
 39 S: No.  
 40 T: Why not?  
 41 S: [???]  
 42 T: Because it falls [???]  
 43 S: [???]  
 44 T: Does it balance? Did it balance? Do you know why? Can you think of why?  
 45 Ss: [talking]  
 46 T: I need your attention in five...four...three...two...one...zero.  
 47 [00:04:06]  
 48 T: Raise your hand—or I mean, put the crayfish in the center please, for a moment. We're going  
 49 to work with them, later on. Now I want to ask you, if you were able—raise your hand if you  
 50 were able to balance your crayfish on your first try? Raise your hand. That's fine. Put your  
 51 finger, I mean your hand down, I'm sorry. Raise your hand if it took two times to try to balance?  
 52 If it only took two tries. Raise your hand if you had to do it more than two? And that's okay,  
 53 because I did too. Alright. Put your hands down.  
 54 [00:04:46]  
 55 T: So those that got it right away, why do you think you were able to balance that crayfish right  
 56 away? Uh...Helena [?].  
 57 S: Because we're not moving, um, like too much.  
 58 T: You weren't moving what, like, too much?  
 59 S: Like, my finger too much.  
 60 T: So you were holding your finger...still?  
 61 S: Like, still.  
 62 T: Okay.  
 63 [00:05:15]  
 64 T: [calls on another student]  
 65 S: What did you ask?  
 66 T: I was asking why were you able to find the balance position right away?  
 67 S: I was able because I was paying attention.  
 68 T: Okay, you were paying attention. [Emily?]  
 69 S: Uh...You were able to get the position right away because you were mindful.  
 70 T: So you were mindful? Or I was mindful?  
 71 S: You.

72 T: I was mindful. But I'm asking how, if you were able to. Okay? So think about that. How were  
73 you able to do it right away? How were *you* able to do it right away? Emily?

74 S: Because you—

75 T: *I...*

76 S: Because I...

77 T: So start with *I was able to...*

78 S: I was able to do it because—

79 T: To do what?

80 S: To balance the...cray...fish...in my hand because I was needed (...). I...I? I...only put my  
81 hands (...)

82 [00:06:31]

83 T: You held your fingers still? Okay, excellent. So I think it helped—I shouldn't have guided  
84 you too much. I feel like that's what I should not have done. But I really wanted you to  
85 understand that I expected you to really be observant of what you were doing? No pencils right  
86 now. Just leave that there. Okay? We're just paying attention right now. Okay? So right now, I  
87 need you to come to the carpet please.

88 [00:07:03]

89 T: So now that you've done that, we're going to use your scientific notebook to document, to  
90 write this down, what you just did. And we're doing it so that you can look at it after we do—so  
91 you can learn from it. Because we're going to do several investigations, several lessons, to learn  
92 more about balance. And we're going to look through your journal—scientific journal—to see  
93 what you—how you—what activities you did, what you were thinking at the beginning, and how  
94 you ended in your thinking about balance and your thoughts about balance. Okay?

95 [00:07:39]

96 T: And to the um, and today we're using what to learn about balance? What are we using today  
97 to learn about balance? I'm asking everybody.

98 S: Crayfish (some students add: tag board)

99 T: Tag board. So the tag board is the material, okay? So, when I go to draw, I need to make—pay  
100 attention to the crayfish tag board. I need to pay attention to the outline of how it looks. That it  
101 has its tail at the top, well it depends how you placed it. If you placed it balanced, I'm going to  
102 draw it this way. But if I did not balance it like this, I'm going to draw it how I balanced it. I  
103 balanced it this way, remember?

104 S: Yeah

105 [00:08:19]

106 T: So I'm going to try to draw the same thing in my paper. Because that's what I did. Or if you—  
107 raise your hand if you balanced it like this?

108 [students raise hands]

109 T: You were able to balance it like this, Ian? You were able to balance it like this? So raise your  
110 hand if you balanced it like this. So is anybody going to draw your picture with your crayfish and  
111 you putting your finger on the nose?

112 S: No

113 T: Okay. So...I'm going to draw.

114 [00:08:51] AUDIO PROBLEM – Persistent Ringing Noise  
 115 [00:08:58]  
 116 T: As best as I can sideways and I'm going to draw my hand and how I use my finger to balance  
 117 it. I didn't use my fingers, I used one finger. Okay? So you guys, I tried my best to show my  
 118 finger there. Okay? Alright?  
 119 Ss: Yes  
 120 T: So everybody point to the whiteboard. Everybody point to the ceiling. Point to me. Point to  
 121 yourselves. Okay now. So aside from drawing the picture. I also want a label. And that's to put  
 122 words to what the picture—what is in the picture. And so right here I'm going to draw a circle  
 123 or—because that's my balance point. That's the place where I was able to balance the crayfish,  
 124 okay?  
 125 [00:10:05]  
 126 T: What is it called?  
 127 Ss: Balance point!  
 128 T: Point! Okay, remember? Where you're pointing. And what is this?  
 129 Ss: Cra—cra—crayfish.  
 130 T: Crayfish. So everybody say that.  
 131 Ss: Crayfish.  
 132 T: What?  
 133 Ss: Tag...board.  
 134 T: Tag board. So I'm going to write that there too. Crayfish tag board. Questions, about what  
 135 you're going to do?  
 136 Ss: No.  
 137 T: Okay. And then we're going to write sentences as well about this. I'm going to present them  
 138 to you so you see them. So, these are examples. You do not have to use them if you want to write  
 139 about something else that you learned during the investigation. So here it says, "I balanced my  
 140 tag board crayfish by...". You can talk about how you did it, or with, what you used and "it  
 141 was"... So I want you to tell me if it was easy or hard for you to balance, and tell me why.  
 142 "Because?" Why was it easy to balance? Why was it hard to balance? Okay?  
 143 [00:11:12]  
 144 T: Emmy?  
 145 S: Are we going to draw?  
 146 T: Yes. You're going to draw *and* label. And then you're going to write two sentences *or more*.  
 147 S: More?  
 148 T: Yes?  
 149 S: When we finish drawing and the sentences, we can color?  
 150 T: If there is time, if you're waiting for other people so that you could see, differentiate. Look  
 151 how this—that you're talking about this, like I did, outline it, like I did, put it outside, yeah, you  
 152 may. Okay? Questions about what you're going to do?  
 153 Ss: No.  
 154 T: Can we read the sentence, please?

155 T+Ss: I balanced my tag board crayfish by with \_\_\_\_\_. It was easy or hard for me because \_\_\_\_\_.  
 156 T: Okay. Yes?  
 157 S: We can color too?  
 158 [00:12:12]  
 159 T: So, I just answered that question. So you can ask one of your classmates, okay? So  
 160 scientists...are very careful about labeling so that they can see their notes and somebody else can  
 161 see their notes and learn from them or be able to do the same experiment—investigation as you  
 162 guys are doing, okay? So we want to pay close attention to how you're doing that. Um, oh,  
 163 before I left you go, sorry, I'm giving out a lot of information. Let's just go to our desks, get a  
 164 pencil and I'll tell you before you start doing this, we need to do something.  
 165 .  
 166 [00:12:50]  
 167 So what do we do when we write stories or when we do writing pieces in the classroom? We  
 168 always write our name and the?  
 169 S: Date!  
 170 T: Date. What else do we also do? What do we also do in every piece of writing that we do?  
 171 [00:13:07]  
 172 S: Title!  
 173 T: We write the title. So, we're going to write "Trick Crayfish" at the top and what else? I have  
 174 my title and what else?  
 175 S: The date? Date?  
 176 T: What do we need? What do we need?  
 177 Ss: [unanimously] Date!  
 178 T: So today is March 22 of 2012.  
 179 .  
 180 [00:13:41]  
 181 So eyes over here. I need three people to share with us, so can you please—Alvaro, read what  
 182 you wrote on your notebook.  
 183 S: I balanced my—  
 184 T: Hold on one second. Not everybody is ready just yet. So pencils down. Eyes on Alvaro.  
 185 [00:13:58]  
 186 S: I balanced my tag board crayfish with my finger. It was easy for me because I didn't move a  
 187 lot. I learned that I could balance myself.  
 188 T: So you can balance yourself? How?  
 189 S: With my finger.  
 190 T: So you can balance other things with your finger? Okay. Do—can you correct that there?  
 191 Other things? Okay. Jeremy.  
 192 S: I balanced a trick, hold on, I can't read it.  
 193 T: And that's very important right there, to be careful when you're writing, that if you can't read  
 194 your writing, are other people going to be able to read your writing?

195 Ss: No  
196 T: So it's very important to write legibly. That means that you can really understand the writing.  
197 Okay, um, Chris.  
198 [00:15:03]  
199 S: I balanced my tag board crayfish (...) ~~{student spoke very quietly}~~  
200 T: Okay so when you—when—remember when I had you read to a partner? So that was the  
201 opportunity to correct these errors so that when you're reading it to me, it's already clear? So  
202 Jeremy, are you ready now?  
203 S: (...)  
204 T: Okay, finish. Can I take a volunteer? Okay, Emily read yours.  
205 S: I balanced my tag board crayfish with my finger. It was easy for me because I did not move  
206 my finger.  
207 T: Excellent. Can you leave everything as is and come to the carpet?  
208 [00:16:13]