Daylene Long ([00:02](https://www.rev.com/transcript-editor/shared/V_vA_6WcxL-PkHkWQNReLk4Z4YBIQsGTQ0tUbDYMpynFTQUp3i1vnUYLio6vtKdoev_Xgt7v6xQAEe9ythI1BuhXcYs?loadFrom=DocumentDeeplink&ts=2.42)):

I am going to go ahead and just turn my thing off and admit him and let you take it from there. Is that okay?

Kimberly Herder ([00:09](https://www.rev.com/transcript-editor/shared/bdK-gPZItUQ3daZTAnwDOEsMJ9oK9w5EWsiRKNar1CO-EIdKcdeVjRuCrBBAFcgzkDdnYorllj39NGjhUIuO1IMtk9s?loadFrom=DocumentDeeplink&ts=9.18)):

Sure. Or do

Daylene Long ([00:09](https://www.rev.com/transcript-editor/shared/Y-qaMyPxW7bqFBw6es0HTNDfH__ALzSC3XAzYXSZAIpewU3oFhHIGo-OmQv_WpAkuPO6oIx50mqnb4V0HZrvbns-jYU?loadFrom=DocumentDeeplink&ts=9.99)):

You want me to do it differently? Okay. Well, unless you just want to introduce it. Yeah, I can do that. Okay. Okay.

Kimberly Herder ([00:17](https://www.rev.com/transcript-editor/shared/a-ucgL-dZUzp30yJgUmVuN9GDBSkVoCF-J4liXPCWFwxsoigdTc-K0lR956GMyOvPgrwZYLZnqepj7W9tVQeXRMeyBk?loadFrom=DocumentDeeplink&ts=17.89)):

Ready? Okay.

Mr. Ruber-Strohm ([00:32](https://www.rev.com/transcript-editor/shared/IfI3tscT4CBuFB4fjWk9QtZkS_1OPwR2PuOvqrtgDllWwMMFhwfg3CLbfq-zhleP8F_9Z83FjXiJglvXgygA1FGXl90?loadFrom=DocumentDeeplink&ts=32.73)):

Ah, cat. Hello.

Daylene Long ([00:36](https://www.rev.com/transcript-editor/shared/AEgw3r2Ag-EPV-qfMgFA9KnsKqpwAquxZs_-ThLAha0MKsFXN1oggyW_nNOnowVh20t4LPpbzIC5dv24PVFFFYqmEgQ?loadFrom=DocumentDeeplink&ts=36.54)):

That was funny because good timing. I've been doing that through many of these sessions where my cat's tail just kind of goes like this through it and I'm thinking, oh man, somebody's going to watch this video and think I have no control of my office because I don't, the cat has control.

Mr. Ruber-Strohm ([00:53](https://www.rev.com/transcript-editor/shared/_Ggtm54EFHv2UQpciVmY6QlOOnD6k7oXa_fRYD_sEWn8UoPX_sejqGb-8eoOvPJwoo15sa0_xqtUYvCSerLuWNtkjm4?loadFrom=DocumentDeeplink&ts=53.73)):

It's the cat's place really. I have cats. I'm a biology teacher. I have, how am I doing this? Bearded dragons over here. There's animals all around.

Daylene Long ([01:03](https://www.rev.com/transcript-editor/shared/ReRfKCul36S4GJjOj3CLJ7FGxZddmXqJN8ZzbQJKkqIXT0dCIfR9XF8c4mcPemY3KIVGLf7SWhu3HXpgLvWpwTFvTKk?loadFrom=DocumentDeeplink&ts=63.03)):

Yeah. I call my cat the office insubordinate. She'll not do anything that I tell her to do.

Mr. Ruber-Strohm ([01:11](https://www.rev.com/transcript-editor/shared/S3O4NMK3lsBpFF-8UOKv2plVUM-Il-5HLAJ1fbUPT3pHNn9xW_c7al3Lg0XwJiuWHvqtzokxEcxtlW4InPWUkMcqcd0?loadFrom=DocumentDeeplink&ts=71.67)):

Perfect.

Daylene Long ([01:13](https://www.rev.com/transcript-editor/shared/jDZ4NotRLgOZszYZHA3dJo_5ltVOGbWTCVdeuMtYVcW8eDHxVT5mR3u0PEOAl4Wxx4gFnfKaIA9lXxLLF33dfSlWXy8?loadFrom=DocumentDeeplink&ts=73.11)):

It's very nice to meet you. I wanted to let you know we are recording this. It's just so I've got notes. I promise you won't end up on YouTube and I'm not going to ask you to do a TikTok dance. We might ask your cat to do a TikTok dance, but

Mr. Ruber-Strohm ([01:27](https://www.rev.com/transcript-editor/shared/s_y5AopkOkqm5CQWFZ68OUptKBiWvv2ChGTl1D5Le33gwpz7WSaJ-MjH4A74ivmT-BAI_U3cqqZLA0MmtP4t45zpK24?loadFrom=DocumentDeeplink&ts=87.84)):

That's fair.

Daylene Long ([01:30](https://www.rev.com/transcript-editor/shared/NQKqIgLaCoomvsvxghmVnaS2BT6qAPl5A_j1kN0BbBMT2OE86KXxLqCFsOpOukMTNdERnUs4UmZ7syVRteIdj_wk-Yk?loadFrom=DocumentDeeplink&ts=90.27)):

And I'm actually going to go off camera and I'm going to turn it over to Kimberly who's got a bunch of questions for you.

Mr. Ruber-Strohm ([01:37](https://www.rev.com/transcript-editor/shared/9Tavcw4R_6yY1H6mczr0de99q3gD9lOMUdg0A2q64ciIC4gDFKwq25h_j1spWLVONo06xZXAG7mr_eoRxwbVfbZtQJ8?loadFrom=DocumentDeeplink&ts=97.17)):

Perfect. All

Daylene Long ([01:38](https://www.rev.com/transcript-editor/shared/Zz77Cjws4DpBekAWs87NlFi2Lzwb5DqZcH5jZ4iZ3ISrbkC-9JhZ6q6Dd_bQGw_9K5-Oa5-hn5EtcKTiFUcjlB6P62o?loadFrom=DocumentDeeplink&ts=98.28)):

Right, sounds good. So we're recording and Kim, you're on.

Kimberly Herder ([01:43](https://www.rev.com/transcript-editor/shared/4fpUOUqxMUD_srxvJWX0ZxtBMidDQuC6yz7pCKNQ2hUniQscgk-1n8RE3pyMrbZVCaGNlc0g_7k_VhI87mD4P32qNwA?loadFrom=DocumentDeeplink&ts=103.44)):

Okay. Well, may I call you Greg? You can call me Kim. Yes. Okay.

Mr. Ruber-Strohm ([01:47](https://www.rev.com/transcript-editor/shared/ethmzxetpID5YvgDKoyKmc6wJbwzn6v1Iv8yBrJ5b0NloN0VwC5rn4A9bPalc4QE7PBSlA696KiwIcZC63vJGerUUZE?loadFrom=DocumentDeeplink&ts=107.91)):

Hi Kim. Alright,

Kimberly Herder ([01:50](https://www.rev.com/transcript-editor/shared/HK_sTqxxNZjgogwF4xFWSTCIop8ir2NXXoXACJusPViLCBsL-l7qLvGsqwLuO9REJxXKMHXy3QJWQDy_C_EFB0J-iJM?loadFrom=DocumentDeeplink&ts=110.73)):

Well first thank you for doing this. It both means a lot to Daylene and myself and the company that there's teachers that professionals that step up to be part of surveys, but it's important to our client. So what's your cat's name?

Mr. Ruber-Strohm ([02:09](https://www.rev.com/transcript-editor/shared/OKFLPPqlLnNvtzG3YUplBqob9RqGe6WxK2UDBHIq5SlMdDnKp30hhLOGHh8L4QMu-u4JC7zo0COg8WcgCUPAarY9l7I?loadFrom=DocumentDeeplink&ts=129.89)):

I actually have two cats

Kimberly Herder ([02:11](https://www.rev.com/transcript-editor/shared/1QDS7lvui1oGvUW_a6x94KkASgLCLFgdym8O53PuJOYlvG0Yh6cXsPh9861EImkMU8oRzktQuy4Hekksiww3ualQDNI?loadFrom=DocumentDeeplink&ts=131.7)):

And they are both

Mr. Ruber-Strohm ([02:12](https://www.rev.com/transcript-editor/shared/oBjzJrxrf-3n9eNrGoCGYbCXBVKTJh54l9nbBN_QJEmgTUnXbr-n3eY9jVpnBVTaCjXOI8al6AIh7fq_36HULK8j-Ww?loadFrom=DocumentDeeplink&ts=132.54)):

Very happy that I'm home. So this is very nerdy. This is thiamine, and then Adine is currently nearby. I'm a biology teacher, so those are two of the bases for DNA. So I call them Addie and Tai.

Kimberly Herder ([02:27](https://www.rev.com/transcript-editor/shared/qpjakQvmtCuEmGZM0_XCwzAF4MJp5z5zl3r19eko24E4lJJmFoBpd5N-08mbs7Yk8joTPq18WVB2d8rOkv9FVbQpSZ8?loadFrom=DocumentDeeplink&ts=147.6)):

Very nice, very nice. Very clever and very nice.

Mr. Ruber-Strohm ([02:31](https://www.rev.com/transcript-editor/shared/IL78_xgW6GEFSNEUvvT6M-_BZXbqdr5VUGXVV1v-F6lJvWG-dWqltSPfm6P2h82h1EGPe-aam7UYXcxJOHggLzHGnSM?loadFrom=DocumentDeeplink&ts=151.56)):

Yes.

Kimberly Herder ([02:34](https://www.rev.com/transcript-editor/shared/LNeRV5RTC7PB2_-QneZj3WUgSJlSNqwN2TfD4DgAKe8_NfDCcH9b3D9pkWoMbbBJp9AgYNUuZEUzHlC1mNViI1IQkhU?loadFrom=DocumentDeeplink&ts=154.68)):

Or I'm going to ask you questions that get into the how and why you've purchased different things or thought about things or involved in different ways that would in the classroom and with your students on how you buy things, how you decide what you're going to teach. All of those go through that part of it. The questions maybe you're going to might think that or maybe a little bit silly because we're going to try to get back into actually the thought process of why you chose to teach certain things or do certain things or how that happens. So we can get a timeline as to the whole process on how the teacher, I'm still here, don't

Mr. Ruber-Strohm ([03:24](https://www.rev.com/transcript-editor/shared/z9r7YrAwbymbTyKjop0NM-ftklUQFiDM21H7D1IpKdKoa2S-IHoEZw5dw-PvyzRECSI1IvQmmWzNE8BXMCXOp2iKUaw?loadFrom=DocumentDeeplink&ts=204.04)):

Worry. Oh, sorry. It's just for whatever reason, the USB is a little bit loose. I'm still here. Yes.

Kimberly Herder ([03:30](https://www.rev.com/transcript-editor/shared/rkbbLR-SPq2r0sT4WKJ686SsWQv5R65tS-_atBM5UiVk_ZQVxiqobrLqxZaUjiFMnpageVGuUS9dtQWbMFhwuSnpGJ4?loadFrom=DocumentDeeplink&ts=210.55)):

Okay. Okay. So that's what that's we're going to do. But first I'm going to have you talk a little bit about your background and why you're doing that sort of thing, but I have to disclose that my youngest son went to Northwestern about the same age as you. So I don't know if you were a wildcat as well. I

Mr. Ruber-Strohm ([03:52](https://www.rev.com/transcript-editor/shared/GaNgfCFOAFizGARpmREYP45H0sAg9Rg5MeAX63wkYm4BmrMIeJMUlaUJg-NJ8NIh6q3_ylgUwFYvYTbtAE-K6ey8CIs?loadFrom=DocumentDeeplink&ts=232.54)):

Was not. I went to U Chicago.

Kimberly Herder ([03:54](https://www.rev.com/transcript-editor/shared/mCtDkAsYOcVpaYE08TZ3DiPb-cFAwyNLQZjyKEwVMRWhYA8U8xrIrNnh_o0GbgBmOSvD1Io1jdh19NZjEiaD3JKUkD0?loadFrom=DocumentDeeplink&ts=234.67)):

Oh, okay. Well, I know that really well as well because I Yes, stayed downtown often when I go to visit him and he's actually moving back to, sorry, now I got totally distracted. He's moving back to Chicago from Portland. I'm in Portland the 4th of January. Yeah. So anyway, I'll be back there again, but love Evanston and know exactly whose School is

Mr. Ruber-Strohm ([04:20](https://www.rev.com/transcript-editor/shared/AH8slTAPVTuR5oAgsF9kiJj3ruBrP8yqcwNMcmNL9t7NGPe01qQHuTwZVkFuCsZXzFICvViyvQUu4Yx-5zrIqmDvPH0?loadFrom=DocumentDeeplink&ts=260.89)):

Wow kids. Yeah.

Kimberly Herder ([04:22](https://www.rev.com/transcript-editor/shared/FloP8WORc4btOOOZPvMXXC1FbkrmvoOymtIUzpobwEuR_I6-rKw2ZGBEOwWVwFGHKNkV6HNJe5qOXQMOd44kQEJutzU?loadFrom=DocumentDeeplink&ts=262.15)):

There we go. There we go.

Mr. Ruber-Strohm ([04:24](https://www.rev.com/transcript-editor/shared/5S0YtTrXX7GCvAlQXf-R7zqN5v_xmjiYWrung5lh90opm_ULW5DMS9UXZ_FEiGHBk3B65h21in4OBkmKz44_xvhmI68?loadFrom=DocumentDeeplink&ts=264.55)):

I literally just came from work. Yeah. Yes. Excellent. Cool. We have a connection then.

Kimberly Herder ([04:30](https://www.rev.com/transcript-editor/shared/g9SazTRQzkVrHgFXy0B9VPRc7Neovi1n_njzTonDwpgY9BgAMs0afhYjs8S2sC0BeJrf3h6_YW61KoidfTuxFAGljpQ?loadFrom=DocumentDeeplink&ts=270.16)):

Yes, absolutely. So if you can tell me a minute or two about why you're doing what you're doing, who you are, why you're doing what you're doing.

Mr. Ruber-Strohm ([04:41](https://www.rev.com/transcript-editor/shared/CoMhnCeG0XWNy1CXBFDZ555LtxJt1KM7B_QFIp9SGLOvG49UytoOOFgVSv7bRwezUZ_jxk_ILzoOs7nQmsP2gnZJF8Y?loadFrom=DocumentDeeplink&ts=281.68)):

Sure. So I'm Greg Strom. I am a high school biology teacher and starting next year I'm also a zoology teacher. I'm going to be having an elective. I'm very excited for it. I'm a PhD dropout. I was the person who was like, oh, everyone's telling me that I want to get my PhD and I'm just going to go along in the path. And I didn't fall out of love with science. I fell out of love with the business of science and really, really intense research and I was just doing a lot of reflection on what I got out of science and how much I enjoyed it. And it all really came back to teachers. So I just really wanted to contribute back into that system if I myself couldn't go through a PhD, but if I inspired one student in my years to get one, cool. If I do two, I've doubled myself. So I just really think that when it comes to science education in particular, there's such a need for experiential teaching and experiential learning. There's a lot of interesting ways to teach science and I'm one of those people who likes to work with the hands-on approach rather than the, I tell you things. I would rather that the kids discover stuff. So that's where I'm really coming from with things in bio.

Kimberly Herder ([05:59](https://www.rev.com/transcript-editor/shared/ZEOWZbfZAvK9lBG7PyZTHyNGgWkgEfHA1DQhMiiFWVHRS1zl9tEOT7VfBHnaSXhDVLQeOQk4wFuYSJq6rFkrl46_SbE?loadFrom=DocumentDeeplink&ts=359.42)):

Very cool. How long have you been teaching? This

Mr. Ruber-Strohm ([06:02](https://www.rev.com/transcript-editor/shared/PwL31D2dr0choLlQZjkaNx4KJ6SnNCcIy7oeQQn1sCazCUeEv1XlGIn0nYUxy5XfTTNZvtqxS3JuEiJepgk_P0C8qds?loadFrom=DocumentDeeplink&ts=362.45)):

Is my seventh year.

Kimberly Herder ([06:05](https://www.rev.com/transcript-editor/shared/JlVEa0mzgXe_wuuOTasocJobvAqVL8JDcitbx5TEubiTybued5_zSb3O8VcvcBmZSPqlS9AI4hbOBPKpsgfH8Y1_pss?loadFrom=DocumentDeeplink&ts=365.51)):

And you've been at the same high school?

Mr. Ruber-Strohm ([06:08](https://www.rev.com/transcript-editor/shared/gmZZdf9ku_MY76kW-Um1in1OoHICKPgu1rAXQyIS8Wh3t0yVJJovMEo8pgpTzGfJDPb6DdlfGcuxiTjH95eDFqCnGBg?loadFrom=DocumentDeeplink&ts=368.18)):

Yes, I've been at Evanston Township High School for seven years, and prior to that, this is my 10th year in education. I was a para before when I was still, after I left my PhD program, I was trying to figure out what I wanted to do and I conveniently contacted one of my old high school teachers and that led to a pair position at my old high school.

Kimberly Herder ([06:27](https://www.rev.com/transcript-editor/shared/PQjUeDv_1g2aLHcBzHm-KXrtOcYXbzpN5RWx7AeuJdw-ZR9J_tCfWQkO33-xycExZRlHaN4WJoMO_xE67e_5QSBGHCc?loadFrom=DocumentDeeplink&ts=387.59)):

Cool. Those connections, those connections mean a lot.

Mr. Ruber-Strohm ([06:31](https://www.rev.com/transcript-editor/shared/TWVMnr3jUWllwnsNjr1JGgztXDah5fxlKJNAfzY_2hCDEV8kmEE07tx9xDWtupbGpEIpbjEjul7QhhaC4FDlhKGLsDs?loadFrom=DocumentDeeplink&ts=391.37)):

They mean a lot to everybody. I'm sure they meant a lot. You meant a lot to them too

Kimberly Herder ([06:35](https://www.rev.com/transcript-editor/shared/ooGqIxXp7yH4rAuS1u5GlnDeAHf7dj4i2DcpbPSmL8TZ-jnFnlsvdWcyp5qar1lvQNpff9v77fnxlLx5G9WvEpl-cgs?loadFrom=DocumentDeeplink&ts=395.75)):

For them to thank you. So I'm just going to jump right in and talk about buying experiences or first in your curriculum and what you do. Okay, so you're doing experimental hands-on learning. How do you start that process?

Mr. Ruber-Strohm ([06:57](https://www.rev.com/transcript-editor/shared/loMJlxx5gENwvPS9JQS0M_D6i1yIHkgVNV1a4duQOAMCzJpDn3agfllttgJ9ujuGLrDTvcbIbjWuVuOUgj_VLmJu84E?loadFrom=DocumentDeeplink&ts=417.68)):

I start that process by asking the students. So I present the students with something interesting, or at least what I think is interesting, something that I hope is going to cause 'em to ask a lot of questions. And then it's designing stuff around those questions. Now, granted being a sneaky teacher, I know what their questions are going to be. So one of the phenomenon that I selected, for example, is cancer. So it's not a happy thing, but it evokes interest and that for the most part, I know what your average 14, 15-year-old is going to be asking about that disease and what they want to know. So once I get those questions, that's what I start with. Whenever I'm working off of designing or working with or deciding what I'm going to be using and purchasing in materials is to see if those are things that are going to directly lead to an experience to my students being able to answer those questions that they have as scientists.

Kimberly Herder ([07:53](https://www.rev.com/transcript-editor/shared/DPQpiXS95dFMv1JVHdAp1kWcrONT9C8tFH3RAOM0gOctqQA3bzVIKGOmufxfX5SYql0QqeiCv4FGklbp8RCY1afXd1U?loadFrom=DocumentDeeplink&ts=473.18)):

I'm going to ask you two questions on that one. When you come up with your ideas for them, are they standards based or do you truly just say, let's do cancer?

Mr. Ruber-Strohm ([08:07](https://www.rev.com/transcript-editor/shared/ANpUZadiOL-d0vSCOWTmLO4RafHqY3ZHPZs55kiilDwUWLrT93b72pyRtB4LnKNGLNo-UUauInN8g9YGBAvqjjrM6DM?loadFrom=DocumentDeeplink&ts=487.73)):

I look at the NJSS standards and there's a bunch, there's just a giant list essentially of main learning targets that we have to go through and I take a look at them and I think, okay, if I was an average 14, 16-year-old and I had to learn mi posis, so that's specifically for this cancer thing, it's like I have to learn mi ptosis. Alright. I personally as a bio teacher, barely care about mitosis. So that's just my opinion. So how can I make them want to like it? How can I make them to want to know how cells divide? Well it turns out that what's just using my knowledge and my background information, I reason oh well is so it's really two options. It's either healing from injury or rapid cell growth, which is cancer. I've tended to find that students have a much more personal connection when it comes to cancer and that has ultimately resulted in that being the most thoughtful thing.

Kimberly Herder ([09:10](https://www.rev.com/transcript-editor/shared/wRD6BxkoXOTCSGMq7voVgcPEM8DFknDYsdekgNCG4WnKZFCTo0yn88gbUPvdTTH1vBy-sOTZZiDdt_creDJCn1OJXSI?loadFrom=DocumentDeeplink&ts=550.67)):

Okay, makes total sense. And I applaud you for it. I want to be in your class. Thank you. So alright, so you decided now you're going to teach mitosis through cancer. What do you do? Yeah, what do you do next? I

Mr. Ruber-Strohm ([09:34](https://www.rev.com/transcript-editor/shared/AUFt1ZWxeOKSbbohuIeE2f6U4OBqHp13M-xvSur1MQozrP-glQ2dmUGRJM1_lof21QmTVaoE7hALLaZoYioznwillTw?loadFrom=DocumentDeeplink&ts=574.05)):

Get students to ask questions and then I gather those questions and then I as the teacher am trying to find materials and it's just things that I can utilize in some way to help guide students through what we call an NGSS, like the storyline that ideally they're going through and developing the story and ultimately at the end they're figuring out what is cancer, how does it work, kind of thing. So that's the next step is any number of things. And realistically, every year I try different things to see what works best. I've tried this and that and starting with this and trying this approach because realistically you can come at it from all different directions and it's partially influenced by the students that year. Sometimes every so often there's a little bit of change or there's something topical, but by and large I'm looking for stuff that hopefully gets that answered their questions.

Kimberly Herder ([10:29](https://www.rev.com/transcript-editor/shared/CoXBGHR9tzqaAe-6iML6VVFXyd2K5vjkvBHqeDINoG2TljbSnG8OSmh2bh-XujMeFYJDX3nsV_D_Is5WpnJK_rvhvw8?loadFrom=DocumentDeeplink&ts=629.25)):

So where do you get that stuff? Is it like kits? Where do you get it?

Mr. Ruber-Strohm ([10:34](https://www.rev.com/transcript-editor/shared/Q7O_KZbb_2ysdrGBlfmisQnVJhJMo8yWOq60kxm_xXzVAiZxPwRfR7r-OVTzzci6mXzAKkUFqJhZ4ghRAyVSwblGJ_c?loadFrom=DocumentDeeplink&ts=634.98)):

I feel like I have put my hands in everything at this point. So I'm part of, there's websites that I go to as of this year. I don't ignore chat GPT for a little bit of help for ideas and stuff. I'm part of social media groups. My school utilizes the Miller Libby Bubble Bee book to see if there's anything in there. I just look for everything for inspiration. But as I'm probably filled out in the survey, I ultimately will end up taking that stuff and making it my own regardless. It's just, I suppose the way that I'm structured as a type A person, but it's like, oh, but I really need to make this specific for me and my kids. I need to put my own voice into it and getting ideas and maybe data and then being where I got a credit from kind of thing, but trying to synthesize things together I suppose.

Kimberly Herder ([11:37](https://www.rev.com/transcript-editor/shared/haH8bGNPI1fbVtujkT6zRkJ_SSXRe2XXE948A22aTGyx-hFXa07fi701cw5npEeTaHsqzZNT8w-K5YIalmjBngHKybU?loadFrom=DocumentDeeplink&ts=697.62)):

So what are some of those, if you'd share some of those websites or social media, where do you go and why do you trust them or do you trust them? Well, you must, if you go to them,

Mr. Ruber-Strohm ([11:50](https://www.rev.com/transcript-editor/shared/kSjistXq2l1kJWJsc27eT5TGLddCX8DRVdznvXrQ1jXJaoTriB8g3bTYEGy27vQeMDqLoIs13uk79a0Nd1hD7Yxt0Wo?loadFrom=DocumentDeeplink&ts=710.7)):

I trust them as a starting point. I trust them as maybe like an idea bank. Honestly, the Facebook groups have some of the most influential things, which is really cool. It's just seeing what other people are doing. I trust them in the sense that it's other biology teachers, they're doing things. I'm not naive to the fact that there are biology teachers who teach very boringly and quite plainly, but I am still able to get inspired by those things and then utilize that to try to construct my own thing, I suppose.

Kimberly Herder ([12:28](https://www.rev.com/transcript-editor/shared/tP9ydi3JwHVaCOFfF484SZ4-UyC19JRBSkqrlEY-5Ea9R3CUvurkdVkkLuYiQ-oiaXCK0lOx58FWzpKl6O7_rsASZDQ?loadFrom=DocumentDeeplink&ts=748.78)):

Is there a particular Facebook group that you like?

Mr. Ruber-Strohm ([12:34](https://www.rev.com/transcript-editor/shared/yOtTagNLSCvmBvy4zZHu7WewWZtpnqUzNLcUFeg1pQnbdtQDOqFDb-B3bFcK-8__yvmkjZdI3kMb3exuiRWJ49mfN1g?loadFrom=DocumentDeeplink&ts=754.3)):

There's one that's literally just called NGSS biology teachers, and then I've also pulled some from the Illinois storylines by Dr. Jason Green. He's just cool and I happen to be friends with his friends. I suppose just someone who's really, really good at Storylining, I think I'm decent at it, but he's really good at going into the full on pedagogy and really getting into the nitty gritty of it, the documentation and stuff and just that stuff. And then in terms of other places for inspiration, literally publications like actual written research that I feel like I could try to translate for students, I suppose it just really depends on what their questions are, I guess.

Kimberly Herder ([13:24](https://www.rev.com/transcript-editor/shared/NC98VW1WqCUQAdXbkZ7phNhr6PwiTr1Z-1xyeh4_FYwNIz9O1YsFi_hqO-PJuS3LAGyaI1DQjHQo4m0oSEif3bZTgvE?loadFrom=DocumentDeeplink&ts=804.22)):

So you've done that part well first actually, can you in a sentence or two say what for our note purposes, so I don't put words in your mouth, what storylining is?

Mr. Ruber-Strohm ([13:36](https://www.rev.com/transcript-editor/shared/C9Wx7b-JV3B306hrhjBhT82fdKrM6omBlWwLSOTmA3NJoZ06b8i0707UeMgO_7pVRwyymy9kvJ9C6i_WN6ivM-_Y8lI?loadFrom=DocumentDeeplink&ts=816.7)):

Storylining to me is starting with a phenomenon and then giving students a driving question and students are interested in answering that question and they travel through a unit in which it's a story-like concept in that it's all linked together and ultimately at the end of it they can look back and see all the things that they've done. So every lesson is leading into the other one as fluidly as you can, or at least is definitely answering a bunch of questions that's leading to more questions so that ultimately they're able to frame and look back at their journey that they've made through discovery.

Kimberly Herder ([14:13](https://www.rev.com/transcript-editor/shared/Z2jUiVZHaxBpRpcl2rpWej8Bfvc2lguXXx8nawwWNT4CTujN7z-K9h0oRpZY2kMp_Jx1C2BGfFIX2o9PFWc8jvf1YRA?loadFrom=DocumentDeeplink&ts=853.99)):

Do you do labs as part of this?

Mr. Ruber-Strohm ([14:17](https://www.rev.com/transcript-editor/shared/nbM8YccKQnHDMSsmJ8LxbDAAk55m3fmpZJl4AcWtq9nKzaZH5-q83ebJLPSYbqM_XPKg8hiCZyj621c_vffq67Xu_oM?loadFrom=DocumentDeeplink&ts=857.32)):

Yes, absolutely. I try to do labs as much as possible or activities. I feel like in bio compared to most sciences, a lot of stuff ends up being maybe not wet lab, but can still be something with manipulatives or sorting or cards or what have you kind of thing.

Kimberly Herder ([14:39](https://www.rev.com/transcript-editor/shared/9bLKi7QzD0TJM0gAgc3tMTOxhGcuzs0FTZWeBDAhZfXNQQd4X7xcBooV0w0YJcyspwgcI3soUfAxDejvg8TqokVE0lc?loadFrom=DocumentDeeplink&ts=879.13)):

Where do you get the things for your labs?

Mr. Ruber-Strohm ([14:43](https://www.rev.com/transcript-editor/shared/MWFfXzAWYn3qDQX6quoEVg7XdaFgZMZLtvTToMWQwfplKqjq5sOgBgB_eLDJZ08GNLJZruzOdEBTsrq1jRg-hKL3wc0?loadFrom=DocumentDeeplink&ts=883.42)):

I purchase lab supplies. Sometimes it's from local places, like I'll go to the grocery store or Dollar Tree. Literally. One of the reasons why I'm a little bit late is because I went to Dollar Tree to pick up some things because doing a lab experience ish tomorrow and I came up with the idea today, of course I will also order or I'll get a lot of stuff from Home Depot and Lowe's, honestly, because plants and stuff. But in terms of science equipment, largely Flynn, Carolina Biological Supply, and I really think those are the big two I and really maybe just some frivolous things from Amazon. I feel like that's lately been my main science equipment stuffs.

Kimberly Herder ([15:37](https://www.rev.com/transcript-editor/shared/kXQ2To0vInV0a804eDgZTFR6PZOvf_GvMp3hrkvLl_gwkKLvrJYCi5-R4RacdCNLaIjBNg34ButzQCGVvfnUGYMRqSk?loadFrom=DocumentDeeplink&ts=937.97)):

How do you pay for those?

Mr. Ruber-Strohm ([15:40](https://www.rev.com/transcript-editor/shared/hpaJnEVMDOaeinhsgYIuY8kM_1Y_4zr2MoF-aNyncX8Q71Y9auZs0VF1OrwAVz-UGOfkr1nK7ls8hdu7cTNL0rLkdwo?loadFrom=DocumentDeeplink&ts=940.22)):

In my school we have either, if it's through Amazon, it's a business account that we use, so we have our own login for that and then my boss approves it. And then business department, if it's stuff that I go and do the shopping myself, I just get the receipt, I have a tax exempt card, I get the receipt and then I get reimbursed after I submit it to my office, to my science department chair. We're a really big school, so I have the, A portion I immediately report to is in charge of 40 science teachers. And if I order it from Flynn or Carolina, I put in a request with our department administrative assistant and then they order it for me.

Kimberly Herder ([16:26](https://www.rev.com/transcript-editor/shared/CtKdmtRn9Fp7qMtUefgOJ_vL8dxrnWAar9mKqizTds3IhDjrSXoRutQwJ-vXZ-R2Q3iHQprdxBFUAGpqmfnKUzA61zk?loadFrom=DocumentDeeplink&ts=986.66)):

Do you have a budget?

Mr. Ruber-Strohm ([16:28](https://www.rev.com/transcript-editor/shared/JBjWnFb7OhD4ptSxzeJMUmt7EWLqZWVT7pOt8ddLeZLxCWEvKjywpfvhMc--MCByeg0OotV5iroq6CmjyLeMEV6ZdAo?loadFrom=DocumentDeeplink&ts=988.73)):

I think I do. I'm very fortunate that I'm at a very well-resourced school. I have not yet been told that I have been doing too much. I tend to be very responsible. I am always very cognizant of what I'm spending and I don't want to ever want to overdo it. Some teachers are not that way apparently from what I've heard, but at least for me, my boss has always just been like, thank you, I suppose. And that's also with the book, we have a book that is technically a, it's not lab supply, it's a resource. We got together as a department and then I was on the three teachers I guess that were making the decision ultimately what book we were going to use and that was also paid by the school kind of thing. So

Kimberly Herder ([17:20](https://www.rev.com/transcript-editor/shared/wiguYLqR3StQfBsOAi8HkHrQ5QeEzL5Wr6GRQx48oOmn0qSUzQbD77k6jHp-nuelTgAsR9JLmivbxs0HgZ8Ce8FH6n4?loadFrom=DocumentDeeplink&ts=1040.84)):

That's a textbook that you kind of go by.

Mr. Ruber-Strohm ([17:23](https://www.rev.com/transcript-editor/shared/An9PDCqIXsSJIayeZ8bjYkZTC0QYRWxXsKE-qdSuD-OGsCEoYxFpU1oqRPZJPvJ_kMcNhKADC_IwCeiugi1SM1UnQBk?loadFrom=DocumentDeeplink&ts=1043.27)):

It's a textbook that I have that I have as a resource, to be honest, textbooks aren't really storyline ish just by nature. They are a document full of facts, no's, no experience there. They might start with a question, but then they just immediately answer the question. So it's a great resource for students to be able to go back to, or it might be something that I can utilize students miss a day and it's something that's just there if needed, if I need a floor for the student. But otherwise it is a reference more so than something that I absolutely go chapter by chapter kind of thing. Okay.

Kimberly Herder ([18:06](https://www.rev.com/transcript-editor/shared/yrZrzY_2lI_7lCr5d9C1vgB6dVa03zYleEW_rjyvx4hdxZaWefBM51FnZl_qqLQdq4lf7qUSVXsUeeK2lkyM7YLNubc?loadFrom=DocumentDeeplink&ts=1086.18)):

I'm going to jump back for a minute that you said that you think about Flynn Carolina and there was a ward I think you said or something. Anyway, what Do you like that is in

Mr. Ruber-Strohm ([18:17](https://www.rev.com/transcript-editor/shared/ZNB3uOKWe5V80MLagnlATnaW0CTS9vhQPmF8WQYWVndmEfWeS2CzReivLuewqy1xJpqh5MCOo4oklBEL-Ogh3RxldwQ?loadFrom=DocumentDeeplink&ts=1097.28)):

There? That's good. Yeah, I didn't say that one, but I do order from Ward too.

Kimberly Herder ([18:23](https://www.rev.com/transcript-editor/shared/Fi2-ar3j2lAEMeMWjnObkIriHNiLRAj5uMSrnhlBhZR0iJGCANPfeEna4jZnqF70tatgxGl7OrXHoy-7pxWnPy5uc60?loadFrom=DocumentDeeplink&ts=1103.04)):

How do you use them or how do you decide you're going to do, do you have a catalog? I mean, when you're kind of brainstorming your ideas and then you say, oh, I'll look at or what do you

Mr. Ruber-Strohm ([18:35](https://www.rev.com/transcript-editor/shared/m7Z-TjxHwRdCXdM5U5xloG5ZWUzdrFoFaE6RDYdQy5a8rv4jr7bhLXCfSR1sBZ4arbnR4fbiULApPk4SapjdxyKfqaU?loadFrom=DocumentDeeplink&ts=1115.91)):

Yeah, I'll be honest. So let's see. I think over my years, some of the labs that I have, I've made myself out of my own knowledge from undergrad in grad school. They're labs that I myself did in high school or they're labs that I asked someone for. I saw that they were setting it up and I was like, Ooh, what are you doing over there? Kind of thing. It's like interdepartmental sharing or it is a lab that I just found and I was like, this is the coolest thing ever. I'd like to try this. And then it's trying to figure out like, okay, they use Petri dishes or pipettes or I have basic supplies, but what unique things do I need to find? I'd like to do a terrarium lab, so I need to go over to Target and get a bunch of containers that can act as terrariums. And then I got to go over here and I got to get which soil do I need to get? And just experimenting with stuff I suppose.

Kimberly Herder ([19:30](https://www.rev.com/transcript-editor/shared/6NalxiUSsQvvwZDlMtHpT3xz1FS22NwCtHRp42SfJoV6OlpD4VWdDZz5l4yFkbF3CzaL_G-hxtKdszNA-UnNhwlfjCo?loadFrom=DocumentDeeplink&ts=1170.2)):

Would you like those things to be in a kit? Would you be a kit teacher?

Mr. Ruber-Strohm ([19:36](https://www.rev.com/transcript-editor/shared/zQcV8YwGEQy9G-qHKI16dKBCSGQ6y31mnv3yd5lZRKKre3QXou_q0DEP3dd6VGDU5uM3wev6L4Utm6PCCfuvIUjEglM?loadFrom=DocumentDeeplink&ts=1176.42)):

It would be convenient if that was available. I feel like sometimes teachers, at least I statements, I as a teacher tend to do such personalized things that I almost screw myself over by doing that because I make it so personalized that kits can't possibly apply to me. And I've tried to make my life easier by being a little bit more flexible. But I would be open to the idea of if it was like I would like to do a terrarium, could there be a kit that I could purchase and just Hello Cat? And just getting them delivered at once would be super convenient because no, it's not my favorite part of my day. Going out after work and then going to Home Depot and then finding out that I also have to go to Lowe's and then finding out that I also have to go to the other Home Depot. I'd rather not spend my time after school getting lab supplies, but that's just kind of how it works at my

Kimberly Herder ([20:30](https://www.rev.com/transcript-editor/shared/VyVuNNaD7K9kfZKbiTYrxlYy0hZg6DL7X-kVcDxADiYFqhvrbJRz7jpsENsbezM1gUazcyy-pJ1WisDTa1a7CCbBudw?loadFrom=DocumentDeeplink&ts=1230.42)):

School. Sorry, this seems like getting into the weeds, but our client is trying to figure out what teachers, and particularly younger teachers, how they make those decisions. So that is where would you, if you were going to say, okay, oh, I want to see if there's a kit out there for terrariums, and where would

Mr. Ruber-Strohm ([20:55](https://www.rev.com/transcript-editor/shared/iG21qQpd1BAPSV0X4LEFMtPDsGpqt0LrtItdl3aDjSYTo4p1GqSaFhXgwx4XN-JXLiTpe3F4M2sbfwwxY2dOuKJLy_k?loadFrom=DocumentDeeplink&ts=1255.33)):

Would I look if I wanted to see if there was a kit for Terrariums, I feel like I would throw it into Google,

Kimberly Herder ([21:09](https://www.rev.com/transcript-editor/shared/nsMX0sr4dLnwScI7BjmTpDR4KsVco9hFjEHtja7jXCDfN80c2KciHF8PndXop87HIgGEKc98LwCtoXeVZulEuTw5Fcw?loadFrom=DocumentDeeplink&ts=1269.04)):

Which

Mr. Ruber-Strohm ([21:09](https://www.rev.com/transcript-editor/shared/jvSlKUyDiztQs8OqPPuDhGDQo8r6QH6MeLdnfRDQKmA7cnfp0sJ3LnmQAb-VfaDBUaGrdTy-0ZQEtPK2OB0pJ0sr0S8?loadFrom=DocumentDeeplink&ts=1269.28)):

Is probably not the best answer, but at least for as a younger teacher, I tend to find that, well, I guess I don't think of Flynn or other places as having kits or maybe I just haven't explored it as much. Oh, Carolina definitely has kids. Yeah. Yeah, Caroline has tons of kits and I should be better at that, but not, I feel like, yeah, I would end up typing it into Google because it isn't necessarily something, at least in that particular case, it isn't necessarily something that's exclusive to education. So there's a lot of citizen science and popular science stuff that we ended up doing in the classroom. But I suppose if we were reframing your question into something that was very specifically like an education thing, I guess I would end up wandering. I would be in Flynn and Carolina and stuff, just being like, what's here?

Mr. Ruber-Strohm ([22:05](https://www.rev.com/transcript-editor/shared/LmD-GAdTa0eJvRlnGV6TpIUs8B2gsgPbt_pQH1SoBB86sv5lX2TR_dOuhuny5EFi5FtV1vEzbADkW1iSw7VM4oAeOtc?loadFrom=DocumentDeeplink&ts=1325.8)):

Is there something, I would love it if there was just a straight up, here's all of these. Do you want to do more labs? Well, here's some great lab ideas, because sometimes I'm like, I don't do enough labs and I wish I had more labs, but I don't know of more labs. And if there was just a giant inventory and I could be like, that one goes with, as someone who does their own curriculum being like, that would go perfectly with my cancer unit or that would go perfectly with my poison dart frog unit, which I have, or my disease unit, I guess that would be, I guess that would actually be very useful. I end up just finding pieces all over the place,

Kimberly Herder ([22:50](https://www.rev.com/transcript-editor/shared/SASg7e3ADUQgPSSu4a92D-99dnOglKnofWBCe6OgmIpLPx9Vl8tpyFHyaarRq6H6RVogewVUotHRQOFgiJpRxfvkdEA?loadFrom=DocumentDeeplink&ts=1370.92)):

And again, I'm going to come back. But that would be related to standard space or does Illinois have a state test?

Mr. Ruber-Strohm ([23:01](https://www.rev.com/transcript-editor/shared/RVNdrQtDlU0HNecwcmQkcmVchaUyURqJlItiZyjhSStLpyzgfIXIe5v7PO4g3CQt4emnQOZWp3FgkeLoA90qFueDTLU?loadFrom=DocumentDeeplink&ts=1381.87)):

Illinois has a science test that students take when they're juniors or something, but it's not something that we teach to.

Kimberly Herder ([23:11](https://www.rev.com/transcript-editor/shared/EmAWcMerqcpwScxFPHtFm29bSiNmZmRgrer7Aov12ZXIlSW90KRqBXmy53rytdvF3ETDgna9RzVSkKrxPaKPi0FgZyI?loadFrom=DocumentDeeplink&ts=1391.17)):

Okay. So

Mr. Ruber-Strohm ([23:13](https://www.rev.com/transcript-editor/shared/Cnfw5U2zWLzyZ1qVg_hXcjx7DB2gx9IQUmg8ME4J58XlrUUL1c5RUIn5yypMGGo0Y9ruT13tSW2LqDM9Z83LxQVoq0w?loadFrom=DocumentDeeplink&ts=1393.24)):

We are NGSS people. We just have end next generation science standards.

Kimberly Herder ([23:19](https://www.rev.com/transcript-editor/shared/_z2oWfKIxM12FwFOTPh-Bjx2bYx0snrn5eAggQTwlw0iPfVf5VOK5N_W0hp2M7Q37asdK2Da1hOOw8nN93_fTsW4YO0?loadFrom=DocumentDeeplink&ts=1399.27)):

Okay. All right. Let me, okay, but if you were to go out, okay, so for the lab equipment you do have, I mean, do you have probes, do you have beakers, that kind of stuff? If you need to replace them or you need to get them, where would you go?

Mr. Ruber-Strohm ([23:36](https://www.rev.com/transcript-editor/shared/3fyvQlbdTd_Ti2yEHVptQ2rd3O98jjPhMy1-Obm0vYyLFEYkdeYtinD8ZkmhK2WyX-hOWirxyTzMe3pO9iOWjURunAc?loadFrom=DocumentDeeplink&ts=1416.01)):

My department secretary usually, and she is very much our, because she is a person who orders for 40 different teachers.

Mr. Ruber-Strohm ([23:51](https://www.rev.com/transcript-editor/shared/7Ca-A17uoVx2P1oMENpo6g9hwfocuQN0_q_jCBfW07Ca_sg0tOwVkDiXo32KTrr1nw51mjFtRMtVzHha2k_Ix2UAXXU?loadFrom=DocumentDeeplink&ts=1431.02)):

This just happened last week. I needed to replace my Petri dishes. I had just done a lab and I needed to order more Petri dishes. And I walked up to her and I was just like, I need to order more of these. Which companies that again, which one is the one that people tend to use? And then she goes, oh, we usually get those from Flynn. I go, oh, of course, from Flynn. Duh. So she just kind of has that expertise. And she's also the one who is much more familiar with, or she is not only more familiar, she literally has the catalogs and she's a younger person too, I would say she's in her mid thirties. She has physical catalogs as well as just all the bookmarked different websites, and she's my touchpoint.

Kimberly Herder ([24:42](https://www.rev.com/transcript-editor/shared/hkYcSVFfVGptAoxAWOSIJ11vk2dmYGzGBmDpMM7B7ExoyKhbhR_MXg7kdGOkPuenZ5MK5OMlMh3l0flRqRu3l3k8EoA?loadFrom=DocumentDeeplink&ts=1482.74)):

Okay, okay. I'm just trying to figure out how to frame it a little bit. So I'm still thinking about, okay, we're going on the timeline from, okay, cancer sounds good, we're going to do this, I'm going to need to, I'm doing my storyline, I'm going to do these certain things. The next step is probably when you get the Petri dishes or you get other things, do you then access worksheets or a video or what's kind of the next stage, next part of the process in your classroom?

Mr. Ruber-Strohm ([25:32](https://www.rev.com/transcript-editor/shared/RsQBb78fQQ_0wg7T3zJPrlXuiFG25oZ2tOIIc_vL_l_LmLsqtozr_u3YjetsxRKplg06kdFBUSWaEo9koSO3zKvfe9o?loadFrom=DocumentDeeplink&ts=1532.45)):

For the planning element or for what I'm actually doing in the lesson?

Kimberly Herder ([25:35](https://www.rev.com/transcript-editor/shared/kbCLF4M8_upL5adP1Gk8onpg7eQ8N230-aD9wyhCw2zUMJ3es5PG1aWq5gGPSlI6cSnacvbI0BPRZiw_Vvk9nr2O0aM?loadFrom=DocumentDeeplink&ts=1535.63)):

Probably both.

Mr. Ruber-Strohm ([25:43](https://www.rev.com/transcript-editor/shared/A8XbMcu-pXVrt9vEgxTRWUV4yuVqBWNAoixZyFvrnOt2xuXgdL_3fU_VpthvoGFBBwz041BpNtIZxhiyi3P9E3wjytY?loadFrom=DocumentDeeplink&ts=1543.34)):

So is this hypothetically if I was doing a new lab and what resources I'm using kind of thing,

Kimberly Herder ([25:50](https://www.rev.com/transcript-editor/shared/6yLY4_Mzuk_SI3jb6GAa3nvZHVvluqJet0Wer7XCtWzbP_bghT_biSaUSbFyoStuY5L8gNPs5qs69L0-3ShIoLEXuzo?loadFrom=DocumentDeeplink&ts=1550.27)):

I'm thinking about things that you've done. So do you use videos? Did they come with the Petri dishes or did they have access because you were using a probe and show the kids how to use the probe?

Mr. Ruber-Strohm ([26:07](https://www.rev.com/transcript-editor/shared/XlebNVcCtREg_n7gNWbJCZIl4HchwNjx930UUlMCQi8Qvkhr2A5ZY3P1JpfSGr5_ouLCYSg1Rh0WlJBnCRGk4v1SJVY?loadFrom=DocumentDeeplink&ts=1567.34)):

There is a lab that I do with a BioRad that is largely a kit's, the PLO lab. That one is relatively complicated. So that one I have, there are video resources that I use for setting up, which are nice because it's a lot of steps and I don't think there's videos for them to show students from them. But there are videos that people have made that show how to swab plates that I might show the students demonstrating. I try to do it in person and also on a video just so they can see it in different ways. I suppose that particular lab has a lot of moving parts to it, and it's like the purpose of that lab is almost like an assessment of can you follow steps and follow directions kind of thing with the students.

Kimberly Herder ([27:00](https://www.rev.com/transcript-editor/shared/pR1Vc7droDOGzyZA94zc3d-Jh7I04iwPZnTB_Lazvz7TYE6xQ5qzsxeLH7YlmXN6U3dj14wRnUpTr5mkR6pZyZuHr9o?loadFrom=DocumentDeeplink&ts=1620.18)):

It's obvious assessment

Mr. Ruber-Strohm ([27:00](https://www.rev.com/transcript-editor/shared/xeuGoiecw56udB2qqbCspURHNtUwhc6_1OG18-U_FIgg9j_yKWhRtQpqx04ysk8G_JeiG6sUlGO1SKuK3sJYvRyABdk?loadFrom=DocumentDeeplink&ts=1620.88)):

Of that. So I suppose for that one there are some video esque resources. Yes.

Kimberly Herder ([27:13](https://www.rev.com/transcript-editor/shared/sSTWRIiPl9rZ_fcEBMdOJNFf_FM3Crz1gUJ5dyHSbUv6wxXUgr865BuUw5X9QSOYr-4oZDaTia_NDKxfL7U86sgZbPQ?loadFrom=DocumentDeeplink&ts=1633.47)):

Okay. Lemme go through the notes here a second. Oops. I'm on my laptop at home and that's never the most efficient. Same. Okay. When you think of Carolina Ward BioRad a plan, have you had any great experiences or have you had any horrid experiences?

Mr. Ruber-Strohm ([27:55](https://www.rev.com/transcript-editor/shared/_DClzUWyik6SOSUUK5Zpvtr-MuQifkuD4zM71d4GzVhbwC5DyGl_-J9rDDGFdfJDjV2F4U8ZeaxivQca3tZ4DUP5BZ8?loadFrom=DocumentDeeplink&ts=1675.29)):

Honestly, the best experiences I've had are out of Carolina because they send very clear instructions with what you order. But those are also usually kit esque, I suppose. And in that way it's very structured for me. So for a fruit fly lab, for example, as opposed to buying all the individual pieces, I guess I am reflecting now on how much kits are nice when I am able to get them, as opposed to me just being like, oh, I need to do a standard bacteria lab and I'm ordering agar from one place and Petri dishes from another place. And then I have all the little, I have all the beakers and stuff and oh, I need Kim wipes, and then it'll like, where am I ordering that from? So a lot of little things or then swabs, where's that coming from? And I don't really have the time to do price comparison stuff. So that for unfortunately falls upon, in my case, my department secretary where I'm just like, I think it's this one. And then she's like, no, you want to order it from here? And I go, of course

Mr. Ruber-Strohm ([29:04](https://www.rev.com/transcript-editor/shared/fE64_kC9JdtSgKlAZdZTQuTtEU3TSvqr1U_NTSNEBuF7vFBVklXaLIOKZr3Xf4VkHtlBVXn2pnY2sUvU_I2LXUmruxg?loadFrom=DocumentDeeplink&ts=1744.68)):

She's also really useful for knowing that, oh, so-and-so also does that lab, do you want to wait a little bit and we can do a bulk order kind of thing. She's very, very good at that. So yeah, I guess with Carolina that's the best case. The worst things is just, I suppose the websites, the inventories are just so many. I'm not a real lab, I'm a lab light. So when need Petri dishes, I don't know why there's 200 kinds of Petri dishes and it's infuriating. Like I'm just an educator. I need the basic stuff. I don't need the crazy, crazy sterile one. I don't need the glass. I just need the ones that are good for 14 year olds. I'm going to get the cheap ones. I'm going to get the cheap ones. It's not that hard. Just give me an option, please, to sort by education purposes or something. That would be nice. I don't need the bougie stuff. They're 14 year olds. I don't need to buy them the $50 swabs. I could go get Q-tips realistically if I wanted to and just nuke in the microwave for something. I don't know. Yeah,

Kimberly Herder ([30:24](https://www.rev.com/transcript-editor/shared/O8aR4V_7tljnb9gzXKHAEDrJjFtRE9WaW6OH_EqFhN9hMYRUeBYyTEFN1NSB_5c9LOOE9jqekvQ68mNL6eVM6betlEw?loadFrom=DocumentDeeplink&ts=1824.94)):

You're the MacGyver.

Mr. Ruber-Strohm ([30:26](https://www.rev.com/transcript-editor/shared/4TH4iQeKzWFQaGuILpmJJRdEvF6kkKL1RcIi2cHR-8tEZUmik61zn9wrmIi2NGyAQvLrCrKM7UhsTnnBXDFunr7hSXQ?loadFrom=DocumentDeeplink&ts=1826.8)):

I end up being that, yes, and I likely make a lot of mistakes with it. I'm not sure I'm the most efficient, but I don't have the time to be the most efficient either. I could, and I'm sure that if I worked at a different school where there really was a budget and that was a much more strict budget, I would have to be more money conscious. But I would be just infuriated by that. And I probably do fewer labs to be honest and just be frustrated by it, I suppose.

Kimberly Herder ([30:54](https://www.rev.com/transcript-editor/shared/vdzTx7xQhrHKZqDYiLKYVnc8aXvse5la1298Lbj_Q2ZGhn-qgo4hHFv60y2GHsEKJdveOEDISQS00ZuWp7Cv5xih_j4?loadFrom=DocumentDeeplink&ts=1854.28)):

So when do you plan out your year? Or do you

Mr. Ruber-Strohm ([30:59](https://www.rev.com/transcript-editor/shared/CtJYY7WfriwHiWANAJNJ8w-eecTwcbyAuXnBBbnQvB2Xo3arqpphKpiDlVjhERoPj7bwGy2TS3cC4SJHd5tJ_Y-KMgM?loadFrom=DocumentDeeplink&ts=1859.38)):

I plan out my year usually at the end of the pre, well, okay. I actually think about the next year as I'm doing the previous year, if that makes sense.

Kimberly Herder ([31:09](https://www.rev.com/transcript-editor/shared/_rQid5__DN77jYeWXPrKBZNK8cDZvl_-OTi6Gw1mNV6H1__b_wpPfPfCVRC7upmpaw5UyUqo7zeQqZqRvyhasxUS-OY?loadFrom=DocumentDeeplink&ts=1869.34)):

So

Mr. Ruber-Strohm ([31:09](https://www.rev.com/transcript-editor/shared/ai8zzHpuPZKMbJaaL5BFNP9MipB9qvTGzA53ylkv6QfypFMAQPuNftHIueGTLib-zCDUFBVc-lHYSdKvLvADmmTv0r8?loadFrom=DocumentDeeplink&ts=1869.34)):

I've had enough instances where I do a lesson and then I just assume that next year I'll remember what went right and when went wrong. So I'm usually pretty good at this point about making notes after the lesson is done, or at least within the week to make notes to myself for next year about what, oh, I use this microwave this time and these are the settings I'm trying to save myself. I always think about it as when I would put away the holiday lights with my family and there's a nice way to put them back in the box, that is a nice thing for future me. And then there's the way of just tossing it in there and then pissing my future self off and being frustrated with my past self. So I try really, really hard to make it so that when I get to May, and I'm thinking about next year loosely, that my stress levels are as low as possible because I know I have those notes available and general plan. But I would say that even in as a person who's almost been teaching for a decade, I usually only plan one unit at a time. I have a general idea of what units I'm going to cover, obviously in the grand scheme of things, but in terms of I just know when my end date is and what the summative is going to be and then getting the questions and spreading things out from there.

Kimberly Herder ([32:38](https://www.rev.com/transcript-editor/shared/YQOBzGPg6PuIZiSpIhY_nzDOLo6quP2t7ntAagkHjSAARHbBulHEhw9Av4r9YruLs_Dgv7hFsRPXpH8mk8rsOEdQEA0?loadFrom=DocumentDeeplink&ts=1958.95)):

Are you doing any dissections or those kinds of things where you need to order things you can't get, probably can't get at Home Depot?

Mr. Ruber-Strohm ([32:49](https://www.rev.com/transcript-editor/shared/gKvD8vdBxFL37j0FD4vYhm_0uit8Pf3mIyHsBEVVF-ZCuq-FYy4b1EpA3KEq1i4vGTwoK2X_Xi71BV0JUv1OUiU-2EY?loadFrom=DocumentDeeplink&ts=1969.52)):

Yeah, we do. In my classroom, we dissect rats and I also usually order at least like pale of fetal pigs just so that there's that option for students. They're usually, if I ordered pigs, they'd the kids would've to be in groups of four. And I tend to find that working above in groups of three, there's always one kid that's not doing anything. But if I order rats, I can have them all the kids working in twos.

Kimberly Herder ([33:19](https://www.rev.com/transcript-editor/shared/s6Me5BKBEh02ICgYJa2es0ljX9-sh06_mbhhksbKVa50deUbssfPCXlO89-aDONiQkDQq80gP7XGSWmtG1MrABRVuZ8?loadFrom=DocumentDeeplink&ts=1999.55)):

And that is because of price.

Mr. Ruber-Strohm ([33:23](https://www.rev.com/transcript-editor/shared/arzHGUTqTfjULmArvUX_10EiVAVtGl9A0i5y8w0ArzQy_eK1P3QCh3hzydhzcjMCFgLddjS61JLjyOjnmHbQUv9N50w?loadFrom=DocumentDeeplink&ts=2003.85)):

Largely because of price. I would not want to spend, again, I don't know what my big picture budget is, but when I look at the price of the pigs, I go, oh yeah, I can't order I 80 of those. That would just not, I am cognizant enough of the fact that I know I should respect that, but rats, they're like $8 a piece now, I think. So yeah, I order those pretty much once I get back from winter break as I put in the order for rats. And then those show up hopefully before May when the dissections at the end of the year when the kids are like, I know them, I know who's going to be difficult. And they're all antsy and it's like, cool, let's just look at rats. Let's do that.

Kimberly Herder ([34:07](https://www.rev.com/transcript-editor/shared/WAmr567OgFejQ-NWbvd9wNFMiKNCVJ2bAXnDuRP0Y3Y_u9HKYGh18I3A0Q5K_4pdxDUPXPQooL4R93rskczN2Ge52hY?loadFrom=DocumentDeeplink&ts=2047.76)):

Okay. So do you remember where you, they've come from

Mr. Ruber-Strohm ([34:13](https://www.rev.com/transcript-editor/shared/CjM16Pgc3OzOYx8rJRYBowI_fN3JiSyIKUQhbRARi7y4y2JwKvCW6oAOgoNcmyRv2VaFB4__DgZ1C7AnECDbXAaQBaw?loadFrom=DocumentDeeplink&ts=2053.55)):

Carolina.

Kimberly Herder ([34:15](https://www.rev.com/transcript-editor/shared/EagVVXa2Vws-zAOcULvXMK-pPwfaW8Ew6tajX5BxRKG4InX0K75Fz5DmiVGBUDGnK9Hi-HF5nph50JVNgN5VqLecWyo?loadFrom=DocumentDeeplink&ts=2055.29)):

Okay. And you like their rats? Because

Mr. Ruber-Strohm ([34:21](https://www.rev.com/transcript-editor/shared/dm1mAVBNX2km2tXB9bcsZQRdrUdUkO4RgO_g4GM9rBEwvpc_7vxGkzkW9xPo7zUrQvOy1haQNMtIfx8m4HBSB9vKiuA?loadFrom=DocumentDeeplink&ts=2061.23)):

When I think of biological specimens, I think Carolina, I feel like that's their niche. I know that there's also NASCO. I get their catalog every so often. I just have had good experience with Carolina. So I guess I just have brand loyalty for no reason, for no reason. I don't know.

Kimberly Herder ([34:45](https://www.rev.com/transcript-editor/shared/PwqvUexwK8tkskVGaUgTdeSxzivhw8Tij_uiF7MbNU29LdhZWpEhgHC68bjHETbpgwr4jMefDRFBftnPsm1A2BZOJqc?loadFrom=DocumentDeeplink&ts=2085.41)):

They haven't done you wrong. They haven't

Mr. Ruber-Strohm ([34:47](https://www.rev.com/transcript-editor/shared/nGhDZlSfHAiw-h0VbNFLZDXTwyDpOX1tQVqpc1YIcRS1oiOsHwifb4PvvmQP_ToYZ-StDgD3I2KpeXKL9EalNVFFk0M?loadFrom=DocumentDeeplink&ts=2087.21)):

Done me wrong. Right. Yeah.

Kimberly Herder ([34:50](https://www.rev.com/transcript-editor/shared/oIU3lS6O12sb5E3ydUgcm3YAjA46XySXuIxbi0IEV4TfyojAkG2GqpT-MpYZw-AcNHgZPh6DtlaITY2K-Z5quzDC5ng?loadFrom=DocumentDeeplink&ts=2090.3)):

So on those catalogs, you said that the assistant keeps track of 'em. Do you ever get access to them and what do You do? I think I wanted

Mr. Ruber-Strohm ([34:59](https://www.rev.com/transcript-editor/shared/4ndAnUMIHzSvP6fPNlaZRD7YqSCaRNckePXd6V56KUW_KUkSj8ZmeJ4OjdHXLdysrigMIyCjzwrp_ILv5YZJzjZnxRg?loadFrom=DocumentDeeplink&ts=2099.21)):

To, yeah, they're in our science office and I know they're there, but they're physical and they're big. And I don't want to, for lack of better words, if I was going to review a catalog, I would do it online. Because online has search functions, find functions, calculators. They're just easier for me. My tech savviness, I suppose when I get a physical catalog, even in my mailbox, I go, cool. And then I just bring it up to the department secretary going like, is this useful to you? That does restrict me in learning what's out there and what's new. I will admit that, but I just am not super physical male savvy or

Kimberly Herder ([35:56](https://www.rev.com/transcript-editor/shared/Uv0_O_07dpdet4-qlJ1HihkdBf1rfC70KLOIAtEGxpVqVS1y2zFuB713lneo3frE80NeMw69iPid83DV4h3tiO7Zguo?loadFrom=DocumentDeeplink&ts=2156.22)):

Interested,

Mr. Ruber-Strohm ([35:56](https://www.rev.com/transcript-editor/shared/iOnkeSoNoslRBBAp1Rr8_VRF2v7gIcDBYdRlMFABWWETtJB2qLV3_sS7HQCsW5wBOsK8WAOTv6fzHgWQ_T4zdgNQ3OE?loadFrom=DocumentDeeplink&ts=2156.74)):

I suppose.

Kimberly Herder ([35:59](https://www.rev.com/transcript-editor/shared/QeHaQgEjV-nUmRt9-0ZOrduXyt0-SkXMCJQf-l5-5kiATnI4wXBVQb_d5xsTElj2tB47QFGQF7YG9k-sowj32xvB8oI?loadFrom=DocumentDeeplink&ts=2159.1)):

So if you're on, do you ever just go on a site and look on et acat? I mean, look what they have to offer. As you're mentioning it, I should peruse this new stuff that's out there more often, but I

Mr. Ruber-Strohm ([36:12](https://www.rev.com/transcript-editor/shared/l6aG9YmuUOqFt9OTZ8Bne3CSH-eezfQ6yUk7HOUMZ6mTg22Rjoif9INe2MTzmIaP2_oqzx4o6yPLyDxURb7XMIhdnpI?loadFrom=DocumentDeeplink&ts=2172.45)):

Don't, and I also, you're just making me think about it. I also don't get advertisements or anything for them. I guess they're not targeted at me slash where would that even be? I don't think that my Facebook does technically know that I'm a science teacher, but I guess it doesn't show up on Facebook. But I feel like if it did, it would show up on Facebook. That's where most of my targeted ad seemed to show up. No, I genuinely, I guess if I was exposed to new stuff, it would be at a convention, like going to a biology NABT. I've only been to two of those just when they happen to be nearby or I happen to go to isef, the International Science and Engineering fair every year and every so often they have some cool research stuff, but not necessarily teacher focused, more research researcher, teacher focus as opposed to science teacher.

Kimberly Herder ([37:15](https://www.rev.com/transcript-editor/shared/kAvJlGCaC0bZLivosc53nK-R1aaVHsiKjSTsJcDNqDoeoNdMFJtACHTdyM4eNTbZ4YKoPPukxw-IPRn6gsR8SghmFZI?loadFrom=DocumentDeeplink&ts=2235.27)):

Have any of those, do they give coupons or would any of that be motivating for you to look at something?

Mr. Ruber-Strohm ([37:22](https://www.rev.com/transcript-editor/shared/jfk6BS0-ijeM8WuYc-Fsaf73-MwMb43hxxBnUtb47vLDWxIvzO7HtglP21kf9D2i_b4Xt0dPqqHqXCbIeDXOmPQUW3I?loadFrom=DocumentDeeplink&ts=2242.74)):

Yeah, the last time I went to NABT, there were a number of places that were really interesting. We went around, the people in my department, we kind of split up and went around little groups and we're like, check that out, go over there and see what that's about. And they give you little promos, especially since ultimately the person who ends up putting the stamp of approval on a purchase is my department chair. And then she's the one who puts the ultimate stamp of approval. This is sciencey claim evidence reasoning is what we teach our kids. So claim, evidence, reasoning. I myself have to come up with claim evidence reasoning. If I wanted to make a big purchase, which I haven't had to do really much for my biology class, but my zoology class, I am making some larger purchases for and for that I need to create a claim evidence reasoning. I need to say, I want this. Well, why do you want this? And so if the company's able to give me that argument already, that's very helpful.

Kimberly Herder ([38:27](https://www.rev.com/transcript-editor/shared/RHgs1YNPZKhY5n9JGgvRoG5Fl89OzTBocNspQ8QyXkYH70S6rPCVC03bmKiXiVbF9GyfJbUiQEAOm4oPE_4pyYdka1Q?loadFrom=DocumentDeeplink&ts=2307.87)):

Well sir, if you're in that process right now and you could talk to a big company, what would they give you to make your life really easy? Say, I'm going to teach zoology. Wouldn't

Mr. Ruber-Strohm ([38:41](https://www.rev.com/transcript-editor/shared/h5Qy5_AeilRAvhfxvmPnFE0dr-FmRzMjKdxyKhs7xCS5ImNJBAbMiDSh_Nk_iGdSxiwBHRiHe4VmtSnwvIZvj-tQDNw?loadFrom=DocumentDeeplink&ts=2321.29)):

It be nice

Kimberly Herder ([38:42](https://www.rev.com/transcript-editor/shared/Ka65NsTTsw_1JXWa0nhrRzxOj1vBb0i2RltMqVEbOm6VPdRYMVg0x1gZoWuJzv-NCP4SkWT8NYuvgJwivq0SlrdnnNQ?loadFrom=DocumentDeeplink&ts=2322.17)):

Best stuff?

Mr. Ruber-Strohm ([38:42](https://www.rev.com/transcript-editor/shared/8Qi2MkJdsgP8gUTzV5wg_rnfCcGSya_MOE44_2n_aI1Z-8ssghgDmvEfhzRu303ge9T9D3eEYJgvKDnCOdA4Ii7GZG4?loadFrom=DocumentDeeplink&ts=2322.84)):

Wouldn't it be nice if there was something that, it's amazing how siloed education feels, even though every single school has a biology program, you would think that it could be standardized in some way, and yet it's not. But there have to be some commonalities and it's like a starter kit, right? I'm starting a zoology class and it is alarmingly difficult to just be like, well, what do I need? Or what do I think I need? What am I going to run into that I need? Is it just the same as a biology classroom? Is it not? What is it? Resource that, as far as I know doesn't exist would be very cool, is somehow being able to plug in, these are all the things I want to do. And somehow there was some AI or something that was able to be like, well, here's all the things you need.

Mr. Ruber-Strohm ([39:48](https://www.rev.com/transcript-editor/shared/3ew8xD7Uqx64Gpd2wv7SP-ysDBvl4puWNXgWvfH37eoUgjg_HKSe38-r_JsXeg0QIoEFoxrieHfGM4ttJhAuJuiKMno?loadFrom=DocumentDeeplink&ts=2388.16)):

That'd be cool. Because I'm just learning that AI is just freaking amazing as of lately. But as far as I know, that's not necessarily a resource. It still comes down to, well, you're the expert, so what do you need? Go figure it out, kind of thing. And then I just assume at this point that most of my stuff is going to come from Carolina, because Carolina has a lot of the zoology things, that's kind of, again, their niche. They have the specimens, they have live specimens, they have models. That just seems to be their thing.

Kimberly Herder ([40:24](https://www.rev.com/transcript-editor/shared/Jxn5_1X5kM9sWl_ovMbLvcyELdfFTxGLExg0pJ1TCTEh2K6aigzWdYLQgz6CBlO8J6DZ0sGEyuEiwksUBtNIcm1QScM?loadFrom=DocumentDeeplink&ts=2424.49)):

And you haven't really started poking around there yet.

Mr. Ruber-Strohm ([40:28](https://www.rev.com/transcript-editor/shared/3brRt-nvRGawUQlnttumsRv4ruW19Y-NR1RTCWSj50wyX15KuIGoHoNt9-IbKwQ2hUKXBEPDZWsVrvZvyHetjSOPrvc?loadFrom=DocumentDeeplink&ts=2428.99)):

I have been making informal lists. It's just like the way that our school is set up. We are currently doing course recommendations right now. So that's the main focus is just to see how many sections there's going to be and how it works. And then the budgety stuff that my boss, her brain hasn't switched next year yet. She's just starting finishing off this year and doing the course recommendations to end. She considers that part of this year, that process is part of this year. And then when we get back from break, that's when we'll really hit the ground running with textbook supplies, giving a tentative budget, how much different specimens might cost, and also any room updates if are necessary to make it so that it's a zoology classroom

Kimberly Herder ([41:20](https://www.rev.com/transcript-editor/shared/o3XZ_H4PklTJ1KqNrgeLNR-QEA_7o_-OleOwsfQEp65xRbhHez100jY1Xt87Lr3uZznGFyf0B1AK5o0MPMQ3-niny2g?loadFrom=DocumentDeeplink&ts=2480.11)):

And safe and everything. So how do you guys keep that list? Is this a Google doc? Is it a Excel spreadsheet?

Mr. Ruber-Strohm ([41:30](https://www.rev.com/transcript-editor/shared/A5ksHpot82XTA2uHv2H7cdw1FUYv7BRS9acC3b4bCCkHTNMpV2rJucyktvPHRcg2ZNWxNrndvdrQpWU-MTCgjxVa320?loadFrom=DocumentDeeplink&ts=2490.88)):

I'm currently making it as an Excel spreadsheet because that is more budgety, I guess, and it's not pretty, but it exists somewhere

Kimberly Herder ([41:44](https://www.rev.com/transcript-editor/shared/V6TC_kLLUEVIuRGHQwnGJCjiC5x1QvJhMKx-TVGhHolqroZbC6jUV9AT0M9Dcl5BGR3WWPiz63KnG4dFASqHOOTzMwE?loadFrom=DocumentDeeplink&ts=2504.45)):

On there. Oh, sorry.

Mr. Ruber-Strohm ([41:46](https://www.rev.com/transcript-editor/shared/cpl6_ChJEMQiPkH17IE3i_ojs-izL0VKLzSmUYEsCHFaIK-PSEdf3Ku1LLHxRZMsMrYEMd11j7qA0KzeZU_dmkQGXmo?loadFrom=DocumentDeeplink&ts=2506.28)):

Yeah, just throwing things in and then just hyperlinks and stuff. So

Kimberly Herder ([41:51](https://www.rev.com/transcript-editor/shared/pkPbGXRvn0WfRgK-WGK4vX5UWJ6Xl8Wv3t4vfwzM6IDLHuZJZGPWwFZembHG7tXTWK0HVmb8aT7Clly0Ls4oDzrK76k?loadFrom=DocumentDeeplink&ts=2511.05)):

On there you could say, zoology kit 1 0 7, whatever, and I could get it that these two different places, but this one's cheaper. Or do you even have to get that detailed, or how do you do that?

Mr. Ruber-Strohm ([42:06](https://www.rev.com/transcript-editor/shared/RplQaivNzu6Mh8-lUeeXNAOb5Er-i4chKEWu14tA6UC3dSNTM7YrUKxcAlcB7XbtsgxmpjpskGXwHsSERyltAzNqXOw?loadFrom=DocumentDeeplink&ts=2526.23)):

I feel like for my own personal level, I end up doing that and also making a note of what it is and what I would want it for. So I usually I would've it organized by aligned with my curriculum, so I have a general idea of what my curriculum's going to be. So it's like, well, this particular kit would go in with the invertebrates or it would go in with animal behavior. It goes in with this kind of thing. As my cats are messing with their food, I'm

Kimberly Herder ([42:32](https://www.rev.com/transcript-editor/shared/HmVUAld9G6jl6XHQjTjaxF4akMuIpAWCa98AbNV7x6Ru9ezU5TeCHm8CvuJY3YWxFnDOueZ4Eb2k3eeN8_Y783jI1rc?loadFrom=DocumentDeeplink&ts=2552)):

Probably telling you they're hungry. They have automatic feeders so they can figure it out. Oh, okay. They're engineers as well? Yes. Oh, and that just made me lose it. I'm such a squirrel person. Or that was shiny. Oh, I think I just lost that one. So when you expect these kits or whatever you're doing in however this goes, that's not, what would you expect in is, is when you order your things, what do you get? Does it come with a video or CD or access to show you how to do them? What would you In

Mr. Ruber-Strohm ([43:22](https://www.rev.com/transcript-editor/shared/4grB4rl4xtZ8KnQoH0zirV06r5wRSZZDMYNTrKw_MVNe3UN680Ax3ZMruEGMkb4-j7UdZQkdNuWCKtuKEM1LblwrVk4?loadFrom=DocumentDeeplink&ts=2602.25)):

A perfect world, I suppose. So let's say I was ordering a kit for a hydro lab, so I haven't ordered that yet. So it's a kit where we're getting live specimens of hydras and there's individual units. Ideally it would be something that I open up and everything. It's kind of like Ikea, e, where it's like here all the parts, they're labeled for every single group they need an A, B, A C, A D. That's what I'm doing. So as a science teacher, it's like I have these, and I think most teachers do this, but I have trays, they're little low trays and I fill it up with all the supplies kind of thing. And then those get distributed to all of my lab stations. But there is a core teacher station where I'm just like, okay, everyone gets a graduated cylinder, everyone gets a beaker, everyone gets this, and then it's right, it goes back out. So yeah, something that's a little bit more clear on that, I suppose.

Mr. Ruber-Strohm ([44:29](https://www.rev.com/transcript-editor/shared/fC0P6uWQNtitoXk3RO_ISVRJ8uNf-cbDro38UUrYUvOspTqc7AXK5Vgg5C5SYFeg3AumH5JCKqWP_VSTjrZ5t1lHHDA?loadFrom=DocumentDeeplink&ts=2669.51)):

I definitely have ordered kits before in the past where it's kind of just like, well, here's a giant bag of blank. I'm like, cool. How much per group? I have multiple classes. So what am I doing? How much am I giving them? Am I going to have enough flavor? Am Are you making me do math right now? Thank you so much. And ideally, as you're ordering it and being like, I'm going to have this overall, it'd be super great if the inventory was almost instead of units, it's like, this is how many lab groups I'm doing. That'd be kind of cool. Again, I think it'd be like most science classrooms. It's like either students are in pairs or in groups of three. And then I just know that in this class I have seven groups.

Kimberly Herder ([45:17](https://www.rev.com/transcript-editor/shared/H9DRIkxNw-hEoXJsfb_IJnfC3kmYcNvmyi653xFs1wKgZkTYvp0R0R9HaZfKinsR5tTG4a1gCjdNOFxz5AVO-ILsZVs?loadFrom=DocumentDeeplink&ts=2717.43)):

When it comes to those groups and differentiating or scaffolding learning, how much of that do you do? And is that a big deal or would that be helpful

Mr. Ruber-Strohm ([45:30](https://www.rev.com/transcript-editor/shared/dJbCl-C1kKyKeca0oV4UppfzWab_ZZLuck8lXR5ZTWq7-L8IXsOmoBOhpn4Xk9bfFjHiSCpUFOhcMZlZE-ixVPvyq4g?loadFrom=DocumentDeeplink&ts=2730.84)):

If there was a resource to do it? I suppose realistically in live, my cat, sorry. What she's learned is she's learned that if she messes with it, maybe some food will drop out. So what was I saying?

Kimberly Herder ([45:53](https://www.rev.com/transcript-editor/shared/oEjeUnof0Ru-A5Iu30DBOAVMf0sL16VIWVJ29K5FXVgMhLWFdk56e1-JhXd6ee-mdKU-3HBo6yYVz4Dk4kLfdunlbuA?loadFrom=DocumentDeeplink&ts=2753.61)):

Differentiating?

Mr. Ruber-Strohm ([45:55](https://www.rev.com/transcript-editor/shared/ignmSV7b1M9hrAMd6Q5FaD8sVPOKBzFZT8O12EUwRmoRVV6HY2KGIUWVKIavT-C5sIsuaW8Lyeos4qBx_H_ebSHr0Ls?loadFrom=DocumentDeeplink&ts=2755.02)):

Differentiating, yes. In the real world, differentiation is done live. I am going over and giving that group what it is that they need in that moment or that student, what they need. I usually don't have as much physical differentiation or at least nothing that's super obvious. If I do differentiate and it's physical, maybe for example, it's like I'm giving students a glossary. Everyone gets the glossary. No one's being singled out for being like, here's this glossary for you. And then some kids choose to use it or not. Particularly in my school, we don't have tracking. So in my classroom, I have students at the fourth grade reading level and the 12th grade reading level. So that kind of results in a lot of needed self differentiation or I in the moment need to switch on a different hat when I'm talking with them and discussing things with them. So if it was something that was just built into a kit, my God, that'd be cool, especially if it's something that's subtle, something that another group wouldn't look over and be like, why is yours written differently? Or Why is yours already premeasured or something. I don't know exactly what that would be. But in terms of most skills that need to be differentiated is reading. That's really the big one. Yeah. Comprehension.

Kimberly Herder ([47:17](https://www.rev.com/transcript-editor/shared/dYcZgWsvjxj78Mvf8pbyWc_8E3stRU15ib_vEGqZzM5vFUp00dWceeIIb6E0GogqgqCA0-UwE4bfF6WFGu2LOOJsiyU?loadFrom=DocumentDeeplink&ts=2837.43)):

Okay there. All right. So we talked a little bit about what your big wish would be, but just to reiterate or if there's something other that, okay, we're going to take this information and we're going to present it to the heads of these companies. What do you want us to pass on? I

Mr. Ruber-Strohm ([47:41](https://www.rev.com/transcript-editor/shared/EV5RoTZZVtcI3PdbMIXh5slhLJVGdyNtdqRgeQdvSDduglHdXD7E3YgIZpcYALq8--U6XlYmSca8RxZfcwMtlL1ZM84?loadFrom=DocumentDeeplink&ts=2861.02)):

Guess it would just be in terms of a big wish. It would be cool if there was a website that just had a giant list of interesting labs. Just labs. Just labs, just a collection of labs. And they don't have to be super fancy, my God, they don't have to be super fancy. They really don't. But there are things that I can look at and be like, oh my God, I want to do that. I want my students to do that. And it's accessible because being a teacher too, part of it is me being human is like, do I have the time to also learn what that is and how that works? I would want it to be something where it's like, cool, I'm going to order one of those for me to try out for myself because I'm going to do it at least once for myself to try it out. Ideally, it's the exact same thing that the kids would have. And then what's like if I end up liking it, I'm able to order it in units of lab groups. That would be amazing. And then ultimately, as you were saying, if it came with worksheets and stuff, again, in my reality, I would probably take that worksheet and I'd make my own from it. I would be spinning it into whatever my particular storyline is, and there's just really no way to, as far as I know, there's no way to customize it that easily.

Mr. Ruber-Strohm ([49:07](https://www.rev.com/transcript-editor/shared/-ZyscCESFQpllIf2LcGPyvKV-XbGXOa8y8d9iSyhDaECYEI-155CCTll1y4JhGblHT3h0hzf0zGKaNe0aEE3MX59PzM?loadFrom=DocumentDeeplink&ts=2947.72)):

But yeah. And then I would also say in the best case scenario, there would also be some sort of a video that literally just does the lab, not as a cheat code for the students, but as a teacher, when students are absent, it's a freaking nightmare, especially keeping lab stuff around. And especially if they're in kits where I'm like, well, you just weren't here, but I'm out of stuff. So being able to give them that experience in some way, being it visual or what have you, and a video where they're like, oh, and here's the data you would get, or here's an example of data that would happen so that they can still do the worksheet and stuff. It's someone who's pretending that they're doing it, I suppose, or not pretending they're actually doing it. Student view.

Kimberly Herder ([50:00](https://www.rev.com/transcript-editor/shared/D2kHZsOMemAhdTcdCS3xPo5mBpFzWJyhy4afQN8wcemyePbGjn55dQvKLB15sa8j9HVOSSYvdczpgmqqwMn2X3FFyfc?loadFrom=DocumentDeeplink&ts=3000.79)):

When you said that, would it be helpful to have a video just for your classmate room at large safety or something that needs to happen in this lab or,

Mr. Ruber-Strohm ([50:13](https://www.rev.com/transcript-editor/shared/ZQiHyYdq5kuVOxGn6GZUCqRU6KvQd5uu7UdxbDyj2qbJZSzQ-J4o_zRCoC_RvZoxBahKiJZnaGrwQ4AX8IfW-kaOaGM?loadFrom=DocumentDeeplink&ts=3013.36)):

Sure. I'd use that, especially if it's, again, it's a kit that I myself did not put together. There might be something that I myself don't necessarily know, so it would be helpful if that was in there and it would be in text, but I'm pretty confident saying I read things, but you never really know, which you kind of miss and being able to make sure that's getting communicated to the students.

Kimberly Herder ([50:46](https://www.rev.com/transcript-editor/shared/z5XhuW73R_D-QOT757RQ9cnWD8di8sZWh96FRbFNr20RojsofakAX80i2FLE0KKO8cM8P55NNIxUgyOIHpiGLB6CFHQ?loadFrom=DocumentDeeplink&ts=3046.19)):

And one more question, and I'm kind of jumping back to when you say you're ordering kits and I'm thinking, okay, you've got a live something coming or whatever.

Mr. Ruber-Strohm ([50:55](https://www.rev.com/transcript-editor/shared/L2xqkoBdfB3D4YlnhEkIL7KXTv7FeO4To1UaxpqAJID0RYAyeeLKXDm-wA3dpl_T12mdk8R7QpRi_e5RASL2dLJZ9f4?loadFrom=DocumentDeeplink&ts=3055.55)):

In

Kimberly Herder ([50:55](https://www.rev.com/transcript-editor/shared/izPYZEjDUf0KhfFbW-oz4z0pCMaDh7Z6aFH2FOe3as0ifZotSIBvqF8-alvsEm3oxquhxuWN7elS5HKLc7ohle2dqd0?loadFrom=DocumentDeeplink&ts=3055.77)):

Other interviews that we've done, reliability has come up often. Where is that in your decision making process of knowing whether you're buying something at Home Depot or you've ordered it from Flynn?

Mr. Ruber-Strohm ([51:20](https://www.rev.com/transcript-editor/shared/Gub70jfTKyPYroOR0ZzWxFwZSkcBcS_xvo6OL0macBCaasx3l1LjSuRI5OvnaLWz2V9Hd86tRACOZuFe-KGBZ0BPtxg?loadFrom=DocumentDeeplink&ts=3080.41)):

I mean, obviously I would appreciate quality. That makes sense. But I also actually, maybe I'm in the minority, but I actually prefer when there's a diversity of results because that's way more realistic of what real science is. I personally enjoyed the discussion of students being like, well, I didn't see that. And then a lot of the labs that we do, or at least that I did in high school, were fake labs. We were told that this is what's happening, but actually the teacher might've added baking. He had added secret little things to make the results happen the way that we wanted to. Why must you do this now? Why do you have the zoomies now?

Mr. Ruber-Strohm ([52:06](https://www.rev.com/transcript-editor/shared/3cFW2PU5mii1kD7dZ88-mtHsq1dJrmlNmUuv71BDIt1xCdo9_xPY3QmFvPP8QZGWSrw8adUbuUKqUM-A3dupuGho824?loadFrom=DocumentDeeplink&ts=3126.83)):

So in real science, the lab doesn't always work, and I actually appreciate when some group's, labs don't work because it's worth discussing the realities of life of, oh, it didn't work. Why don't we think it worked? And that's not error analysis. I mean, it's partly error analysis, but it's also like, well, where did we mess up? What did they do differently? What didn't you take seriously? There's life lessons to be learned there. It's actually ridiculous that when students are like, what do you mean a PhD takes eight years? It's like, well, it's not like you're just showing up and doing lab time. You're like, this was made for you. This was someone's PhD thesis in the thirties. This has been tested for you. So I actually appreciate variation in results. I appreciate variability and even a little bit of flexibility if possible. Heaven forbid, and this is slightly different thing, but it'd be cool if even if the kits that gave students choice in whatever that lab might be, giving them a little bit of flexibility and like, do you want to go this? You could do this, you could do this. You could see what happens here. It depends on the specific lab, but realistically, at the end of the day, my students are not going to remember the scientific facts. They're going to remember the experience and the skills that they're getting out of it. And in some cases, again, it's not, this is how you measure with a beaker. Oh, it's important that I'm paying attention when I'm measuring out anything basic lessons. But those are the lessons that need to be learned

Kimberly Herder ([53:42](https://www.rev.com/transcript-editor/shared/ZQKwvy0SMZf30QkEWwSp6AswtpQxz2eABmMIy0fBdKOer02EnvZcF-_0VKDDYZfBB4mkEfReRSzNzh7ALOong45bDQU?loadFrom=DocumentDeeplink&ts=3222.06)):

And that they'll remember that part too. Yes. Okay. Well, thank you. We went over time and I apologize for that. I was late. Well, I appreciate the insights that you've given and your enthusiasm, and who knows, maybe next time I'm in Evanston, I'll see if the security at the front door will let me in.

Kimberly Herder ([54:11](https://www.rev.com/transcript-editor/shared/o8IK-S842DiDIVGANM7-h8pzIOcQZxblV-hMoJQ9ckROao07N6ei4SmpPvxD4eV9v_h6W8ukokRib6vjbHCD-MG5VaE?loadFrom=DocumentDeeplink&ts=3251.07)):

So next steps are that it'll really be there tonight or tomorrow morning. I'll send you an email that will have a thank you because yes, it's a huge thank you, but it's going to have two more questions in it. Just one, if you think of something tonight, tomorrow, the next week, the next month, whenever either that we talked about and you want to add a little bit more on to or something else that you just, we work with a lot of large life sciences companies and would have the channel to be able to pass on information. So

Mr. Ruber-Strohm ([54:54](https://www.rev.com/transcript-editor/shared/rcmc6Jl1h3CL4ilLRR5mtsi-qc8yI3la2U4ovvPuuqyg5nJZsaIyG30GSK3J2DGVy_eK9Xklep9hiPHhD1m7fj9oDsk?loadFrom=DocumentDeeplink&ts=3294.06)):

That would be cool. And then the second question is if you would like to participate in something like this again, again, this

Kimberly Herder ([55:00](https://www.rev.com/transcript-editor/shared/J17b-9H85p_FshvopA8S0x3iKd6yI9LuW2lKqoFAFzH98efsMuoPKAFjiPhtPy-HHjTmPlPGnRDA2EC5DWYK29YedtE?loadFrom=DocumentDeeplink&ts=3300.81)):

Is what we do.

Mr. Ruber-Strohm ([55:03](https://www.rev.com/transcript-editor/shared/18Ab_xhKtEITmVlSp48lJ3dXRqazDG-O4Cut67QM6jqbVD8lOxqHJfRUDFACDwKBH40OIB_C62K3dMh2qpgAB8u5j_E?loadFrom=DocumentDeeplink&ts=3303.24)):

I enjoy these. I feel like it's useful because, and in some way I will admit it feels a little bit arrogant, but it's like I feel like I'm a good teacher and it's just like what influence I can have to try to help other people be good teachers. And part of that is through resources and being able to communicate. That's part of the reason why I'm so involved with the social media is being able to communicate to someone being like, that's a great idea. Have you also considered just talking to the kids? Just little pedagogy tips that are Yes.

Kimberly Herder ([55:43](https://www.rev.com/transcript-editor/shared/TQ-I2igXcJthCs-cS3S4pwT0_PhfctsfFunncjx8LTdugmenT4J9BNuB__ar10t85i9xD64JhWNOU9b5td1dprAMzcM?loadFrom=DocumentDeeplink&ts=3343.17)):

Yes. So that's good. And then Daylene or your gift card will come from Daylene and you'll have an option. It can be, you can do a Visa gift card or Target. I mean, there's several different things on there that, different cards that you can use for the holiday or whatever you want to. Cool. We'll do that and let me see if I'm thinking. Do you have any questions?

Mr. Ruber-Strohm ([56:11](https://www.rev.com/transcript-editor/shared/RkfoL5EDm2DD23EOdNzN8hEGrnJSCTeXmyyNRP_fjatgnFii11TZICckt7gwjqdZacxp2-O84Hc6CY83tsY3uRiP5lA?loadFrom=DocumentDeeplink&ts=3371.61)):

Not right now.

Kimberly Herder ([56:12](https://www.rev.com/transcript-editor/shared/oSksIubsze2RGL-z40n2amgv1CXu4D30_Wbqm53ydmQYget4O7P9tlNiaS6QO4rFIV5wG6meBi-pXawA00uwWCNy7qU?loadFrom=DocumentDeeplink&ts=3372.72)):

Okay. Alright. Well then I'll give you your evening back and your cats and your zoology in the making.

Mr. Ruber-Strohm ([56:21](https://www.rev.com/transcript-editor/shared/iCmAQ7ahEj4qrJsUdK4WYZYtC3mitJLrnjjDWjxYR3HDhoRWc4NSwIGkhxCpEluUTAvZuxNtspfAyCT735JHbnE2Hgk?loadFrom=DocumentDeeplink&ts=3381.95)):

Yes,

Kimberly Herder ([56:22](https://www.rev.com/transcript-editor/shared/Q1tuD_GQKtJDLNrk_umW6FUzXVJTv4RCWU8VYlMI97Yxulwpstk9CeYucZbHnymB9_LegnFmpdSAT7nCEwEDljqFNYs?loadFrom=DocumentDeeplink&ts=3382.98)):

Yes. I'm very

Mr. Ruber-Strohm ([56:23](https://www.rev.com/transcript-editor/shared/OvenanbdpTHa1F07CUEbYOCKiSV1dmPuBofBVLih6s7R9R-GpSGyLh9YJT5zBguoVY0orMC6xaTwE1EnXoNH1P9vBXU?loadFrom=DocumentDeeplink&ts=3383.32)):

Excited.

Kimberly Herder ([56:24](https://www.rev.com/transcript-editor/shared/llao9aqmMDFbnhbUkaVpNB6-9lhD4jwnjj7-hpqWee3pZz0aDqpa2xDz_wk7j6zD68Ru0oMOU7TwjpUaqgvDVQcFYN0?loadFrom=DocumentDeeplink&ts=3384.13)):

Okay. All right. Thank you so much. Thank

Mr. Ruber-Strohm ([56:27](https://www.rev.com/transcript-editor/shared/e1nO3CcroDrOasu9RIwulCe4bSYns4-GvfvHe8Rg5XsFHJFWrM_GsQEHBA_55T268879ug5eBASFK1jSLdr7tVNYtCE?loadFrom=DocumentDeeplink&ts=3387.04)):

You.

Kimberly Herder ([56:27](https://www.rev.com/transcript-editor/shared/EYJuB8X3evNb49gsZFxkn_w_5EaWt3YMXYlR50gepE_S6GBd64zqICHZ0sb3uNnB1Ydw968zLXMb3fHzqaU0uJ3KK1Q?loadFrom=DocumentDeeplink&ts=3387.85)):

Okay, take good care.

Mr. Ruber-Strohm ([56:28](https://www.rev.com/transcript-editor/shared/dXfT4jEGUiXlUvX08lgkWjGfbH5IfA2h5nxyxY4347oYzNkCjXA9ZYfHeWpnltj-rx_jjk-3akvEyAdzvIA3oW4dx1s?loadFrom=DocumentDeeplink&ts=3388.99)):

Bye

Kimberly Herder ([56:29](https://www.rev.com/transcript-editor/shared/gchDMMMG37J4y2GddGTdD7B8amsUtwPGDoYaMdP15Z6vJ_J6GdgIjZdu23veyhKF7Pr05tzNZ-NRFxj1Yf6BlPfp1Aw?loadFrom=DocumentDeeplink&ts=3389.63)):

Bye.

Daylene Long ([56:42](https://www.rev.com/transcript-editor/shared/KPTPQuHIQyiW_-a3iH7T1aV_1E9jiDgERsSR_WtUcucTR_mVARk4JgBnbxyBhGokkp6joShfRn0oS4s-PUG7KkvACZ8?loadFrom=DocumentDeeplink&ts=3402.76)):

I got to jump to my next call, but it sounded like it went well.

Kimberly Herder ([56:46](https://www.rev.com/transcript-editor/shared/5FcxAlVDrbqDQcdH0oWeCUou0duUAoeRtNpW01f6pPQnTAQTzWHylYCqj2Ntx0lw8debUTZUnRBY2SNyxdVbXOlEadM?loadFrom=DocumentDeeplink&ts=3406.93)):

Alright. Yeah. Did you hear a little bit? We went long. I was trying to get things back in and Yeah, a little bit. I had dinner with my husband though and just kind of

Daylene Long ([56:56](https://www.rev.com/transcript-editor/shared/gheERtxp12htLGeIEbCfL_PmYGcoOS3CQ6-NLwcgQZuvbWvKETGKe89qc2NVVt1VJAtcnIm5V6fly1nkPaiLL2EPpwE?loadFrom=DocumentDeeplink&ts=3416.2)):

Rested for a little bit and I got to hop off to my next call, but I'll get the gift certificates out tonight and we'll talk tomorrow.

Kimberly Herder ([57:02](https://www.rev.com/transcript-editor/shared/kX9QPZRMeqWKamEF63Pr6MaRNxGXLNIRTVNBrQjM-3CLQQBdMFw2OLn4GPS2dGwyZNZykDTfsaI3r86d6yDlKWOjFk0?loadFrom=DocumentDeeplink&ts=3422.8)):

Okay.

Daylene Long ([57:03](https://www.rev.com/transcript-editor/shared/iPth8qXhoYqHvJudnuzTFzZp2DJ8I5rNk4i-alER9UesOxP6jeYT-v9aJHdtsT9fwFQeD512h4GKQ_mE-DC1a06dneY?loadFrom=DocumentDeeplink&ts=3423.91)):

Okay. Take Care. Thank you so Much for doing that, by the way.

Kimberly Herder ([57:06](https://www.rev.com/transcript-editor/shared/asdp4A4ehBEqiGaykfCPwi0Pve1FJk0kmtSyBpG2fk91BCWnXoVHQnApS0hkai54Vs2vtXB48AG9TOQDIM6bziMJsvE?loadFrom=DocumentDeeplink&ts=3426.97)):

Oh, absolutely. Okay,

Daylene Long ([57:08](https://www.rev.com/transcript-editor/shared/K_GXKABfvTuK4Hx1_dkb_O7mbdXLRcywENNC66Xac3A61h9W_nWdwI10EjmPMXH4HCXGrAM_S9wXTzMYI2gAXNc-Eg8?loadFrom=DocumentDeeplink&ts=3428.23)):

Bye.