

TRACY SOLA: For this lesson, um, it's from the problem of the nuts, squirreling it away. And the premise of the problem is that there is a squirrel collecting nuts and the squirrel has five nuts and gives some to another squirrel and then we're supposed to try to figure out how many nuts are left once the squirrel gives some away.

So, I am going to start this lesson by putting seven ... um, counters in a little bowl and -- first I even want to see if they can choose five. So -- or how many they will choose when I ask them to give the first squirrel five. So, I'm not starting them off with five, I want to see if they can choose five to begin with. And so, I will be interested to see what they do with that, and then the next thing I'm going to do is ask them to give one to a friend and see what happens. I want to ask them how many are left once they give one away. Um, I'm anticipating that some students will still think there's five left because they started with five and won't count down by one, or won't give one away and then count their stack again. So -- but we'll see what happens. I'm also anticipating that some students will just use all the counters and not keep track of the number I've asked them to use.

So, it'll be interesting to see what happens. I'm going to go on from that and ask them to put them back and then give the squirrel four. And then once the first squirrel has four, I'm going to ask them to give two away to the other squirrel and see if that number is a little bit easier for them because of doubles. And I'm just interested to see what happens with that and see what happens because it's an even number, too. So that's what I'm looking for in this lesson.

TRACY SOLA: So, today we are going to do some math again today, is that fun?

STUDENTS: Yeah!

TRACY SOLA: I think so too, but today I would like to start with a story, and I'm wondering if you know what this is.

STUDENT: I know --

STUDENT: A squirrel!

TRACY SOLA: A squirrel?

STUDENT: I know.

TRACY SOLA: Tell me.

STUDENT: A squirrel.

TRACY SOLA: A squirrel.

STUDENT: Squirrels eat nuts.

TRACY SOLA: Squirrels do eat nuts.

STUDENT: I was chasing the squirrel!

STUDENT: Me too.

TRACY SOLA: You were chasing a squirrel? So, this is a story that I'm going to tell you about a squirrel. This is a story that I'm going to tell you about a squirrel. So, Isabela, are you ready, dear? Great. Did you know that squirrels work really hard all spring and all summer to gather their food for the winter?

STUDENT: Yeah.

TRACY SOLA: Adam, what do they eat? You told me what they eat.

STUDENT: Nuts.

TRACY SOLA: They eat nuts. So, all spring and all summer, they gather nuts – um, can everybody please sit criss-cross applesauce?

STUDENT: I'm doing that.

TRACY SOLA: Criss-cross applesauce, honey.

STUDENT: I'm already doing it.

TRACY SOLA: Thank you. Beautiful. So, they gather nuts all -- we know that squirrels gather their nuts all spring and all summer and they take them back to their house and they hide them ...

STUDENT: In a tree.

TRACY SOLA: In the tree, and they hide them and they save them, and then in the winter when there are no nuts on the trees, they have food.

STUDENT: Um.

TRACY SOLA: Right? Yes, Adam?

STUDENT: Squirrels -- some squirrels hide their nuts in the tree.

TRACY SOLA: That's true, some squirrels hide their nuts in the tree.

TRACY SOLA: So today, what we are going to do is we are going to think about a squirrel that has been very lucky and he has gathered many nuts and he has decided to share with some friends. Do you like to share with friends when you have something?

STUDENTS: Yeah.

TRACY SOLA: Me too! If you have a lot, you can give some to some friends, right?

STUDENT: Yeah.

TRACY SOLA: That's great. Okay, so, let's see ... What I would like for us to do is go to tables, but we don't need to go to the back tables, just these three right here. Thank you. I would like to thank the friends who did not touch their color tiles, who have them all in the bowl and they're waiting to hear what we're going to do, thank you. Great! Okay, so ... Does everybody have this picture on their map?

STUDENTS: Yeah!

TRACY SOLA: Um, who can tell me what they see? Raise your hand if you can tell me.

STUDENTS: Squirrels and a tree --

TRACY SOLA: Ah, let's see ... Tell me what you see, Julian.

STUDENT: I see a tree.

TRACY SOLA: I see -- does anybody else see a tree?

STUDENT: Yeah!

STUDENT: Me!

TRACY SOLA: Right, okay. And, Adam, what else do you see?

STUDENT: I see squirrels in the tree.

TRACY SOLA: You see squirrels in a tree? You remember our signal! Me too. Um ... José, how many squirrels are there on your picture?

STUDENT: Two.

TRACY SOLA: Two squirrels. Does everybody have two squirrels on your map?

STUDENT: Yeah! Yes.

TRACY SOLA: Here's what I would like for you to do. I would like for you to pick one squirrel, one squirrel, and give that squirrel five nuts.

STUDENT: Woah ...

TRACY SOLA: Can you please pick one squirrel and give that squirrel five nuts? Can we pretend that the color tiles are nuts?

STUDENT: I want this one.

STUDENT: One, two, three ...

STUDENT: Five.

STUDENT: How many she says?

STUDENT: Five!

STUDENT: Two, three, four, five!

STUDENT: One, two, three, four, five.

TRACY SOLA: Do you need those?

STUDENT: One, two, three, four, five.

STUDENT: Five! I have five nuts.

STUDENT: I did it!

STUDENT: That way the squirrel can eat this.

STUDENT: It looks like he only gets two.

STUDENT: Him left, I'm going to do the boy.

STUDENT: I want to do the girl.

TRACY SOLA: Okay. I would like for you now to tell a partner how you know that one squirrel has all five nuts.

STUDENT: You go with me.

STUDENT: Let's ...

STUDENT: Um ...

STUDENT: The lighter, um ...

STUDENT: Um ... um ... The squirrel has, the squirrel gets ...

STUDENT: The squirrel has to save the five nuts for spring.

STUDENT: Yeah.

STUDENT: One, two, three, four ...

TRACY SOLA: Does your squirrel have five nuts?

STUDENT: Um ...

STUDENT: Because the squirrel likes nuts.

TRACY SOLA: Can you count them for me?

STUDENT: Because the squirrel eats nuts.

STUDENT: Because the squirrel likes to -- not, if he take all the nuts at the tree he don't have nothing to eat.

TRACY SOLA: Beautiful. Bradley, does one of your squirrels have five nuts? Great.

STUDENT: Mine does!

TRACY SOLA: Great.

STUDENT: Mine have five.

TRACY SOLA: Okay! Now --

TRACY SOLA: Here's the fun part, are you ready?

STUDENT: Yes!

STUDENT: Yes.

TRACY SOLA: I would like for your squirrel to share one nut with his friend.

STUDENT: One nut ...

TRACY SOLA: I would like for your squirrel to share one nut with his friend.

STUDENT: Oh!

STUDENT: Diego, Diego ...

STUDENT: This squirrel is getting one.

TRACY SOLA: Now that he shared, how many does he have left?

STUDENT: Four!

STUDENT: One!

STUDENT: Four!

STUDENT: One!

TRACY SOLA: Tell a partner how you know.

STUDENT: Four! Four, four, four, four, four, four, four, four, four, four, four!

STUDENT: Four, four, four, four, four, four, four, four, four, four!

STUDENT: Four!

STUDENT: Four!

STUDENT: Four! Four! Four! Four!

STUDENT: Four.

STUDENT: Four!

TRACY SOLA: So this squirrel right here, he shared a nut, yeah?

STUDENT: Because ...

TRACY SOLA: Uziel, did your squirrel share a nut? Did he share yet? You know, he can do it, but thanks for being a good friend. This squirrel would like to share with his friend. Here's his friend over here.

STUDENT: Um ...

TRACY SOLA: Can he share one nut? Can he give one nut away to his friend?

STUDENT: I did that!

TRACY SOLA: Can you show me that? He's going to give one away ... Oh, he doesn't get to use these.

STUDENT: The one, that's all in the pot.

TRACY SOLA: Yeah, that's in the pot. Okay! So, one more time, Adam, did your squirrel share a nut with his friend? How many does he have left?

STUDENT: He has one, two, three, four, five, six.

TRACY SOLA: How many did he start with?

STUDENT: He started with one.

TRACY SOLA: He started with -- this one started with one? Eduardo, how many nuts did your squirrel start with right here?

STUDENT: One, two, three, four.

TRACY SOLA: He has four now? Well, so now I have a question at this table ... Adam's squirrel now has six, Eduardo's has four, Ariana's has three and four, and what have you got here, Joseph, how many does your squirrel have now that he gave one away?

STUDENT: Mm, four!

TRACY SOLA: He has four. Why do we all have different numbers here at this table? Hmm ...

STUDENT: Because! Because we didn't do it right.

STUDENT: Because we're trying to do math!

TRACY SOLA: Because we're trying to do math. I think we are trying to do math.

STUDENT: [laughs]

TRACY SOLA: That is true.

STUDENT: That's a funny one, Diego.

TRACY SOLA: That's a funny one.

STUDENT: One, two, three, four.

TRACY SOLA: Would you -- if from this table and this table, would you be willing to do a favor for me?

STUDENT: Yeah!

STUDENT: Me!

STUDENT: Yeah.

TRACY SOLA: I want you to stay sitting where you are and I want you to keep all of your nuts right where they are -- do not move them, please. I would like everybody from this table to put your hands behind your back and come and stand by this table. Everybody put your hands behind this back and come and stand by this table -- up by me. You get to stay in your seat and you get to stay in your seat. Can we -- friends, can we all come up here? Okay. Can everybody see the work that our friends have done at this table?

STUDENTS: Yes.

TRACY SOLA: Okay, so I would like for us to think about our friends' work. Can somebody remind me --

STUDENT: Me!

TRACY SOLA: How many did our squirrels start with?

STUDENT: Me, me, me. Me!

STUDENT: Six!

TRACY SOLA: How many did our squirrel start with? Does anybody remember? The very first part of the story, Diego?

STUDENT: I know! Five!

STUDENT: Um ... We have the first time we had to have put five nuts.

TRACY SOLA: And Isba says five, yes Isba? We started with five.

STUDENT: Yeah, and then we give one away!

STUDENT: Me too.

TRACY SOLA: And then we gave one away. And ...

STUDENT: Then we had four!

TRACY SOLA: So, if you can back up a little bit so everybody can see.

STUDENT: Me, me, me!

TRACY SOLA: Which friends have a picture that shows that story? We had five and we gave one away. Which friends have a picture that shows that story?

STUDENT: Four.

TRACY SOLA: Does Adam's picture show that story?

STUDENT: No.

STUDENT: No.

TRACY SOLA: Why not?

STUDENT: Because he has six nuts.

STUDENT: Six nuts. One, two, three, four ...

TRACY SOLA: Well whose picture do you think shows that story?

STUDENT: Eduardo's.

TRACY SOLA: Eduardo? Why does Eduardo show that story?

STUDENT: Because he has four. Four nuts.

TRACY SOLA: And so, if I -- can everybody put up five fingers? If I start with five, and I give one away ...

STUDENT: Four!

TRACY SOLA: How many do I have left?

STUDENTS: Four!

STUDENT: Four, four, four, four, four!

TRACY SOLA: Four, four, four, so whose -- so do you agree that Eduardo's picture shows that story?

STUDENTS: Yeah!

TRACY SOLA: Who else's picture shows that story? Anybody else?

STUDENT: Ariana?

TRACY SOLA: Oh!

STUDENT: Ariana.

TRACY SOLA: Okay, um ... Can you -- yeah, thank you. Okay, you all can sit down.

STUDENT: But they fall off!

TRACY SOLA: You all can sit down now to your tables.

STUDENT: A sister, my squirrel. My squirrel fall off.

TRACY SOLA: You can sit down. Okay. Is everybody ready at their seat for a new story?

STUDENT: Yes!

STUDENTS: Yeah!

TRACY SOLA: Take all of your color tiles and put them back in the tub please.

STUDENT: I have two more. I have five already.

STUDENT: What?

STUDENT: I have two more.

TRACY SOLA: Okay, are we ready?

STUDENT: Yes!

STUDENT: Yeah!

TRACY SOLA: Okay, this time I would like for you to give one of your squirrels four nuts.

STUDENT: Four nuts?

TRACY SOLA: Four nuts.

STUDENT: One, two, three ...

STUDENT: Two, three

STUDENT: Four!

TRACY SOLA: Okay, does your squirrel have four nuts?

STUDENTS: Yes!

STUDENT: One, two ...

TRACY SOLA: Can you check in with your partner and make sure your partner's squirrel has four nuts?

STUDENT: Four ...

STUDENT: I have four nuts.

STUDENT: You have? I have four nuts.

TRACY SOLA: Uziel, can you make sure that Diego has four nuts?

STUDENT: I know it's four -- one, two, three, four.

TRACY SOLA: But let's let him check just to make sure. Can you check in with Diego? Okay. Okay, Adam did you check in with Eduardo?

STUDENT: Yeah!

TRACY SOLA: Does one of his squirrels have four nuts?

STUDENT: Yeah!

TRACY SOLA: Does -- and how many does the other squirrel have?

STUDENT: Three!

STUDENT: Three.

TRACY SOLA: Oh!

STUDENT: None!

STUDENT: Zero!

TRACY SOLA: None, zero, zero. One squirrel has four and the other squirrel has?

STUDENT: Zero!

TRACY SOLA: Zero.

STUDENT: Nothing!

TRACY SOLA: Zero.

STUDENT: Four?

TRACY SOLA: Ah, zero. Okay ... Now, your squirrel that has four nuts? He is going to give two away to his friend. He is going to give two away to his friend.

STUDENT: Two!

STUDENT: Now he has two!

TRACY SOLA: Now he has two, did you just hear José?

STUDENT: Two of them!

STUDENT: Both of them have two!

TRACY SOLA: Both of them have two?

STUDENT: Mm ...

TRACY SOLA: Are you okay over there?

STUDENT: I don't feel well.

TRACY SOLA: What?

STUDENT: I'm going to throw up.

TRACY SOLA: Are you going to throw up? Okay, come on, honey.

TRACY SOLA: So, let's remember where we were. We had four -- one squirrel had four nuts.
And then ...

STUDENT: They had two!

TRACY SOLA: And then he gave two to his friend and now he has --

STUDENT: He has two.

TRACY SOLA: And now he has two.

STUDENT: And two!

TRACY SOLA: And you said they both have two. What happens if we have two and two? How many is that all together?

STUDENT: Three!

STUDENT: Three!

STUDENT: Equal!

TRACY SOLA: Four -- equal, oh they're equal -- oh!

STUDENTS: Equal!

TRACY SOLA: Is this what we do when we mean equal?

STUDENTS: Yeah!

TRACY SOLA: They're equal?

STUDENT: Equal.

TRACY SOLA: They are equal. What does equal mean?

STUDENT: That means they are the same numbers!

TRACY SOLA: That means they're the same numbers. So, there's two on one side, two on the other side?

STUDENT: Yeah!

STUDENT: No.

TRACY SOLA: That's great.

STUDENT: I wanted to go --

STUDENT: What?

STUDENT: I wanted to go to sleep.

TRACY SOLA: [laughs] Okay, so if we have some and we give some away, then we share, right?

STUDENT: Yeah!

STUDENT: Right.

TRACY SOLA: Okay. Can I ask you to all come to the rug with me? Let's just think about what we did.

Great, thanks. Do you remember in the first story we started with ...?

STUDENT: One --

STUDENTS: Two, three, four, five.

STUDENT: I didn't know you can use that.

TRACY SOLA: It's a magnet, isn't that handy?

STUDENT: Oh! It's a magnet?

STUDENT: We have magnets!

TRACY SOLA: So do I!

STUDENT: But why do they have the squares inside?

TRACY SOLA: Oh, it's just the kind I have. So --

STUDENT: It's a fluffy one.

TRACY SOLA: So, the first time we gave all five nuts to one squirrel, didn't we?

STUDENTS: Yeah.

TRACY SOLA: Do you remember --

STUDENT: Then we gave one away.

TRACY SOLA: Then we gave one away. When we gave one away ...

STUDENT: Then we have three.

TRACY SOLA: How many were left?

STUDENTS: Four!

TRACY SOLA: I would like for you to turn to a partner and tell them how you know. How many and how you know.

STUDENT: Four!

STUDENT: Five!

STUDENT: 60! No, 61, 62.

TRACY SOLA: Cyril, would you like to talk to your friends here? You can come right over here and talk to them.

STUDENT: Five! Four! Four, four, four!

STUDENT: Um, four!

TRACY SOLA: Thank you.

STUDENT: Four!

STUDENT: Six!

STUDENT: Four, four, four, four, four, four, four, four!

STUDENT: My turn.

STUDENT: Four!

STUDENT: My turn! My turn!

STUDENT: Stop, Ariana.

STUDENT: Adam, you are with Ariana.

STUDENT: No, I'm over here.

STUDENT: No!

STUDENT: No, you're with him.

STUDENT: Uh-uh. I'm with Lucy.

TRACY SOLA: Are friends ready? Ariana, are you ready, dear? Hello.

STUDENT: We counted four.

TRACY SOLA: So, what did you find out, Isabela?

STUDENT: Because there is four in there.

TRACY SOLA: How did you know there were four?

STUDENT: Because they take the one out.

TRACY SOLA: Oh, oh!

STUDENT: I know! I know!

TRACY SOLA: It's Isabela's turn to talk.

STUDENT: They take one out.

TRACY SOLA: We took one out and there were four left?

STUDENT: Yeah.

TRACY SOLA: Okay, Isba. What would you like to say?

STUDENT: Um. Before we gave one.

TRACY SOLA: They gave away one. Okay, yes? Zyra?

STUDENT: And, and ... And they're twins because they got two.

TRACY SOLA: Oh! That was the other one, wasn't it? Yeah. Julian, one last comment.

STUDENT: There was four because that squirrel gave away the other square to the other squirrel.

STUDENT: And then one!

TRACY SOLA: He gave away one and there were four left? Let's count to make sure.

STUDENTS: One, two, three, four!

TRACY SOLA: How about Adam and Ariana. Ariana, why don't you come up here with us? Okay? And Adam, why don't you stay back there? There we go, okay, wonderful. Okay. Then you remember the next time, the second story there were four?

STUDENT: Yeah.

STUDENT: Yeah.

STUDENT: Yeah!

TRACY SOLA: How many did we give away the second time?

STUDENT: Zero.

STUDENT: Zero.

TRACY SOLA: I thought we gave our friend two? Did we give our friend two?

STUDENT: Yeah and two -- two and two.

TRACY SOLA: Two and two. And what did you say about that, Zyra? What did you say about that?

STUDENT: It's equal!

STUDENTS: Equal!

TRACY SOLA: Equal?

STUDENT: Right, because she said that to you.

TRACY SOLA: She said they're equal.

STUDENT: They both do that.

TRACY SOLA: How many do they each have?

STUDENT: One, two, three, four.

STUDENT: Two!

TRACY SOLA: They each have two? Okay. I would like to thank you for playing this game with me today.

STUDENT: Okay.

TRACY SOLA: I am going to ask you to do this. Stand up, I will walk you back to your classroom and I will stay with you until your teacher comes back.

STUDENT: I know how -- I know how to go ...