

00:00 So. Let's get to your experiment. The person across from you is going to be your partner. All right? Each partnership is going to get an experiment.

00:19 Those experiments are going to rotate around your group. So in the end you will have done three experiments.

00:25 The first experiment is shoelaces and beads. And you will time your partner on how fast they can thread beads onto a shoelace.

00:38 And I'll tell you how long your time is in a minute. O.K.?

00:43 So hold that. Leave the manipulatives alone for now. That would be great.

00:55 O.K. I sure did choose the wrong path there.

00:58 Second one. Chop sticks and cubes. How quickly can you use the chopsticks and take the cubes off the plate. O.K.?

01:22 Ah. I heard a great question. What if you can't use chopsticks?

01:27 You're going to have to figure out a way. I think I stole somebody's chopsticks. You and your partner can both have them. All right.

01:41 And our final activity is counting rice. Given a certain amount of time how much rice can you count?

01:55 All right?

02:05 O.K. So. What about the time? Because that's one of our units. That's what we are working with.

02:10 Well each group is going to be working with a different amount of time. So.

02:17 You guys are going to do all of your experiments based on ten seconds.

02:24 You guys are going to do all of your experiments based on fifteen seconds.

02:31 You guys, all of your experiments, twenty seconds.

02:38 You guys are going to go for thirty seconds. All right?

02:43 So. Before I let you go I want to give you a little procedural stuff.

02:49 One person does the experiment. The other person times. O.K.?

02:57 Write down the results as a sentence and then write down the results as a ratio.

03:04 Just like we did up here. Then you switch. Your partner does the experiment and you time.

03:12 When you are done with the first experiment, there are two more at your table.

03:17 Make sure you and your partner agree on the rate that you completed this experiment. Give me a thumbs up if everybody understands what to do. O.K.?

03:29 All right. Remember to use the clock. Good luck. Here we go.

04:19 Ah. Interesting. So you were comparing each...how much each person did. That's an interesting way of doing it. What I want you to do is...well

04:31 look at the rates that we put up there. Look at particularly ...miles per minute or mile per hour or the heart rate stuff. How could you use that to change your rate.

04:58 O.K. I like that you did that. That's cool. But, this bottom term, shouldn't it be the time that you did the experiment for? What do you think? Does that make sense?

05:13 O.K. So what was your's? Your's was one? Oh, Your's was six. O.K.

05:43 O.K. Beads? Kevin. Beads or cubes? O.K. Great.

06:00 O.K. guys, I'm going to bring you back in. I'm going to ask everybody who is doing an experiment right now, continue until you are done.

06:08 But then I don't want you to continue on to another experiment. I want to talk to you about it. O.K.

06:23 We've got some rice counters and some chop stickers still going.

06:31 Let me ask you a question. What was your best event? What was your fastest. What were you able to do the best at? Melina.

06:45 Counting rice.

06:47 Counting rice. Counting rice. Yeah. Counting rice. Yes.

06:58 How many of you believe that counting rice was your best event.

07:00 All right. You got to tell me. Quiet hand if you believe that you were the fastest rice counter in the room.

07:08 Come on, confidence! Who believe they were the fastest rice counter in the room. All right.

07:15 I want you to tell me, I want you to tell all of us. What was your rate at counting rice?

07:28 Thirty-seven over ten.

07:31 Thirty-seven over ten. We're not certain what that means.

07:39 I counted thirty-seven pieces of rice.

07:42 Wow. Thirty-seven rice in ten seconds. I want another person. Sinole?

07:53 Thirty-three rice over twenty seconds.

07:59 Thirty-three rice in twenty seconds.

08:06 Seventy pieces of rice in thirty seconds.

08:12 Seventy rice, thirty seconds. Who won? Who won?

08:28 Talk with your group. Who won? Why?

08:41 I have statement to make. Let me say something to you. Based on what you told me, I can't tell.

08:53 I don't know who won. Hold on. I need you to fill this out. There are two questions on this sheet. It says, "Why can't we tell from only our raw data..."

09:09 Why can't we tell from only our raw data, who counts rice the fastest. Why can't we tell? Hold on. Express it all on paper.

09:22 And the second question says, "What could we do to our raw data to find out." Please describe as many different strategies as you can think of.

09:32 So based on that information, we can't be absolutely certain who won. Why not.

09:41 Second. How can we figure it out? Write it down.