- 00:00 Let's get started. First of all my name is Joe Condon. You guys can call me Mr. C.
- 00:06 I teach in Brisbane School District. Down near San Francisco. Right next to the Cow Palace.
- 00:12 We'll talk about one thing before we start and that's active listening. I know that we've moved your desks to make it difficult to actively listen but I ask you...
- 00:21 If somebody is sharing, to turn towards them. If I am speaking, to turn towards me. So we actively listen with our eyes and our ears. O.K.
- 00:31 Everybody good with that? Alright.
- 00:37 We're going to do a little experiment with rate. O.K.?
- 00:43 I'm going to do the first one and then you guys are going to do some experiments.
- 00:47 We're going to talk to each other. We're going to talk across our desks with our partners and as a group.
- 00:54 And in the end I think you guys are going to come away with an excitement about continuing the study of rate and, a little bit, deeper knowledge about what rates are.
- 01:07 All right. So. I'm going to start. I need this group to time me for ten seconds.
- 01:17 Up in the front of the room is a five meter tape.
- 01:21 I'm going to walk this tape as fast as I can.
- 01:26 I need this group to count how many times I walk back and forth on that five meter tape. All right?
- 01:35 This group, you guys have to tell me what was my total number of meters, that I walked. Based on the fact that this is a five meter tape.
- 01:47 You guys back there, when they yell start, you watch the clock for ten seconds and you yell stop.
- 01:56 Thumbs up everybody understands their job. All right. You guys are going to tell me when to start.
- 02:02 So, eyes on the clock. Use the second hand up there. Give me a Ready, Set, Go, whenever you are ready. Let's actually have, what is your name?
- 02:11 Sammie.
- 02:12 Sammie? Why don't you yell it out for us. Tell me when I'm ready to go.
- 02:18 Now.
- 02:33 Stop. Good. Now. O.K. stop.
- 02:39 Let's go here. How many, back and forths, did I do?
- 02:43 Seven.
- 02:45 Everybody agree?
- 02:46 Yes.
- 02:47 Total meters?
- 02:48 Thirty-five.
- 02:59 Thirty-five meters. All right. Let's put down our first rate.
- 02:55 I traveled thirty-five meters in ten seconds.
- 03:08 What I'm going to ask you guys to do is if I double the amount of time. If I double the amount of time to twenty seconds.
- 03:26 Talk to your group. If I am keeping the exact same pace, talk with your group, about how far I will travel.
- 03:35 Go ahead. Talk to your group right now.
- 03:39 Once I see a thumbs up from everybody in a group I will know they all agree.
- 03:43 All right. Looking around I see some from everybody. Well then on the count of three tell me how many meters I will have traveled. One, two, three.
- 03:51 Seventy.
- 03:53 All right.
- 04:01 Same situation. Now I'm going to do that shuttle walk for sixty seconds. How far will I have traveled? Talk with your group.
- 04:14 Make sure everybody in your group understands how you did it.
- 04:29 When I see thumbs from your groups I will know we can get an anwer.
- 04:34 All right on the count of three. One, two, three.
- 04:38 Two hundred and ten.
- 04:39 Oh my goodness. Now obviously I would have passed out by then but... we will put his up. That's why we did only ten seconds.
- 04:48 Hey guys notice what I am doing after each term. Whether it be the meters or the seconds.

- 04:56 What is this?
- 04:58 Quiet hand. Anybody know the M and the S represent?
- 05:04 Meters and seconds.
- 05:06 Meters and seconds. Super important when you are writing a rate, that it has meaning. O.K.?
- 05:12 Each of the terms has meaning. All right.
- 05:17 Let's switch this up. Let's talk about how long it would take, given the pace that we've established here. How long would it take for me to go a hundred meters?
- 05:30 Go ahead and talk with your group.
- 05:33 What the heck. Go ahead you guys. Pull out a calculator.
- 05:40 Had a group over here estimating. Any groups come up with an estimation also?
- 05:47 O.K. So going this direction you are thinking divide. And in going this direction you are multiplying.
- 05:54 How many times are you going to multiply thirty-five.
- 05:59 Two point eight five rounded off.
- 06:02 So you tell me that it's two point eight five. Good enough.
- 06:10 How do we use that two point eight five?
- 06:12 Twenty-eight point five what?
- 06:15 Seconds.
- 06:17 Agreement? You were right there. Very nice job, this group. Really good job.
- 06:23 Do you agree also? Is that where you were headed Ryan?
- 06:25 Yeah
- 06:26 Excellent. All right. Notice I continued to put the M and the S. All right.
- 06:36 Last one. Our unit rate. How many meters per second am I walking?
- 06:44 Make sure your whole group understands it before you put that thumb up.
- 06:49 We've got a thumbs up, this group. Thumbs up here. Thumbs up back there. Great. On the count of three. Tell me, how many meters per second am I moving. One, two, three.
- 07:00 Three point five.
- 07:01 All right. I agree. That's quick. It's fast. All right.
- 07:08 All right you guys. That was excellent. You guys really, obviously, have a good grasp of rate.