Division Procedure
Video Script

Scene		Full Transcript
1	**Skylar:**	Man! What a day! Adding fractions, subtracting fractions, ratio tables – I am beat! And, I still have this message to answer. I looked at it before. Looks like he needs some help with division. Let's see, "Dear Skylar, What do I do? My two friends and I raked a lawn, and now I am struggling to divide the money equally." Hmm, how do I explain this? Whew, maybe a nap would help.
2	**Math U:**	I'm here to show you there is no secret to long division, and when this show is over, you'll see how it's done. What's the connection between you and long division? Well, it's something you can use every day. Follow me! This is where all the secrets are kept. Long division can be easy. I promise; there are no tricks up my sleeve.
	Voice-Over Assistant:	Matthew, you have no sleeves.
	Math U:	Yeah, right. Ladies and gentlemen, I will now disappear and let my magical assistant take you into the world of long division.
3	**Voice-Over Assistant:**	Let's say you and two friends worked hard to clean up your neighbor's yard, and he gave you $72 to divide between the three of you. In your hand, you have seven $10 bills and two $1 bills. But, you realize you can't divide 7 tens into three, or 2 ones into three. So, how do you go about the process of dividing the money into three equal parts? Start by making three equal piles with your $10 bills.
	Math U:	Ahh, but you have one ten left over, along with two ones. Will this require magic?
	Voice-Over Assistant:	No, Matthew, this is not a trick. Here's all you need to do. Simply take that $10 bill, and trade it in for 10 ones. Now, you have 12 ones. Take those ones and divide them equally into the three groups. Add up how much is in each group.
	Math U:	No, wait! Let me add it up.
	Voice-Over Assistant:	All right.
	Math U:	Well, there are 2 tens, so that's 20, and then each group also has 4

		ones, so that makes 24!
	Voice-Over Assistant:	That's correct. We just solved our long division problem. You and your two friends get $24 each for helping your neighbor. That means 72 divided by 3 equals 24.
	Math U:	But, what if you want to write out this problem on paper
4	**Voice-Over Assistant:**	Start by writing out the big number, 72. Put the number 3, that represents you and your friends, to the left of 72, like this. Now, think about your seven $10 bills and two $1 bills. When you divided those tens into three groups, you put 2 tens in each group. Now you need to write that 2 into your equation, like this.
	Math U:	Oh, I get it. You can put 2 tens into three equal piles, so you write the number 2 right above the 7, which represents all of your $10 bills.
	Voice-Over Assistant:	Exactly! If you think about your three equal groups that now have two $10 bills in them, that is a total of 6 tens that you've already divided, so that number goes right below the 7. And, if you subtract that number 6 from the 7, you get 1, which is the one $10 bill you had left. But remember, you still have 2 ones left, as well. When you traded out that leftover $10 bill for 10 ones, you had a total of 12 ones. If you drop this 2 down next to your 10 that is written out, you'll see that it equals 12. And, what did 12 represent in your money? Remember, it was how many ones you had after you traded out the leftover $10 bill. And, how many ones were you able to put into each group? Four! So, that number goes above the 2, and there's your answer in written form.
5	**Math U:**	Thank you, Magical Assistant. So, long division is really just figuring out how many equal groups of stuff you can create. You can do it with models like your dollar bills or blocks of anything that are based in tens, like your $10 bills. For bigger problems, you may start with a 100-dollar bill or a block of 100 items.
6	**Math U:**	With a little practice, this will be as easy as pulling a rabbit out of your hat. Well, now you see how it's done, and you know there's no magic to long division!
7	**Skylar:**	Oh! *Problem Solved*.