Variables and Patterns #1   Teacher Notes and Answer Key

Possible Directions to Student: Match the story to the graph and table that represent the same information.

Answer Key:

GRAPH 2

Group 1. Sam is the Jumper
Sam started out really fast. She did lots of jumps in the first few seconds. As time went on, her number of jumps for every 10 seconds was less and less. She was almost not jumping at the end of the 120 seconds.

Table C
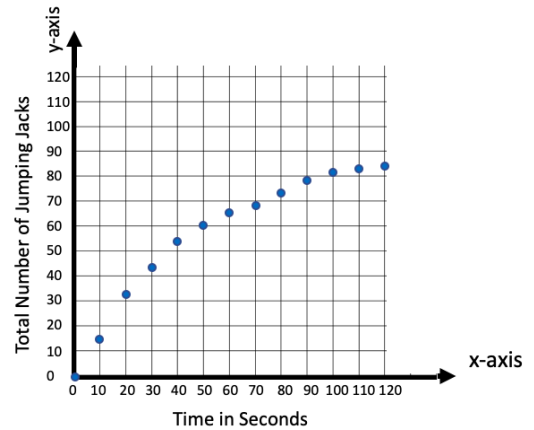
Time (seconds)	0	10	20	30	40	50	60	70	80	90	100	110	120
Total Jumps	0	15	31	44	54	60	65	69	73	79	81	83	84

GRAPH 4

Group 2. Paulo is the Jumper
Paulo jumping was very steady. He did about 10 jumps in every 10 seconds. He was able to keep this pace for 2 minutes.
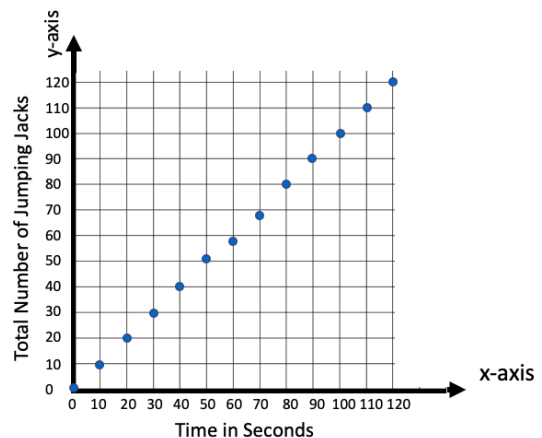
Table A

Time (seconds)	0	10	20	30	40	50	60	70	80	90	100	110	120
Total Jumps	0	10	20	30	40	50	59	69	80	90	100	110	120

GRAPH 3

Total Number of Jumping Jacks vs. Time in Seconds

Group 3. Li Wei is the Jumper
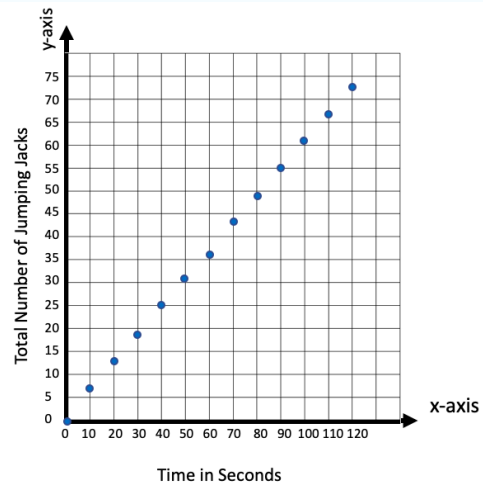Li Wei kept a consistent pace. As time increased by 10 seconds, he did 6 more jumps for each time interval.

Table D

Time (seconds)	0	10	20	30	40	50	60	70	80	90	100	110	120
Total Jumps	0	7	13	19	25	31	37	43	49	55	61	67	73

GRAPH 4

Total Number of Jumping Jacks vs. Time in Seconds

Group 4. Ana is the Jumper
Ana had a steady pace for the first 20 seconds. Then the pace slowed down, increased, slowed down, and finally in the last 30 seconds the pace increased a lot.

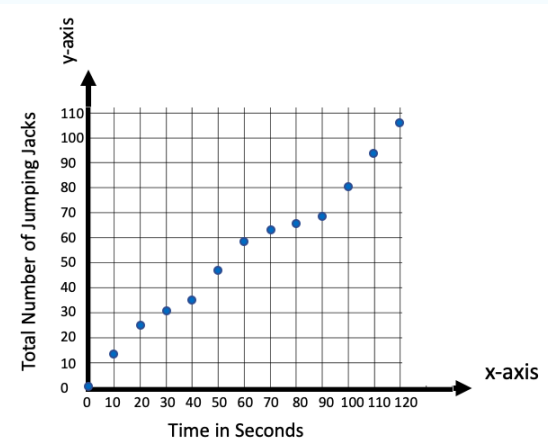| Table F													
Time (seconds)	0	10	20	30	40	50	60	70	80	90	100	110	120
Total Jumps	0	12	24	30	35	48	59	62	65	68	80	93	107

GRAPH 6

Group 5. Torie is the Jumper
Torie started with consistent jumping. As time increased by 10 seconds, she did about 10 jumps. Near the end of the time, her shoe came untied. So, she stopped jumping.
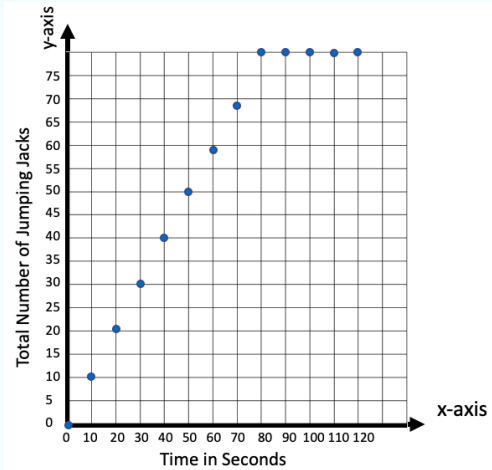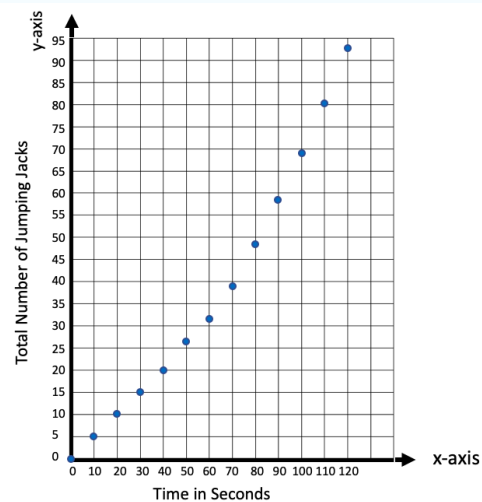
Table B													
Time (seconds)	0	10	20	30	40	50	60	70	80	90	100	110	120
Total Jumps	0	10	20	30	40	50	59	69	80	80	80	80	80

GRAPH 5

Group 6. Jackson is the Jumper
Jackson started with a steady pace. Then, as time went on, his total number of jumps grew more and more.

Table E

Time (seconds)	0	10	20	30	40	50	60	70	80	90	100	110	120
Total Jumps	0	5	10	15	20	26	32	39	48	58	68	80	93