Part 2: Guided Practice:
Create a data table for the examples demonstrated by your teacher

Example #1 – fossil

SCENARIO: Susan observed that fossils were present in a cliff behind her house. She wondered if changes in fossil content occurred from the top to the bottom of the cliff. She marked the cliff at 3 positions, 5, 10, and 15 meters from the surface. She obtained samples from 3 areas at each height and determined the number of fossils in each sample.

ANSWER:

The Effect of Depth on Fossils Found (#)
Height

	5 meters	10 meters	15 meters
Sample 1	3	5	10
Sample 2	2	6	11
Sample 3	5	7	13

REASONING: The depth (5, 10, 15 meters) represent the 3 levels of IV, the samples (1, 2, and 3) represent the 3 trials. The empty boxes would be filled in with your data (DV measurements) when you do the experiment!

Example #2 – plants

SCENARIO: After studying about recycling, members of John's biology class investigated the effect of various recycled products on plant growth. Three flats of bean plants (3 plants per flat) were fertilized as follows: *Flat A:* 450g of 3 month old compost, *Flat B:* 450g of 6 month old compost, *Flat C:* 0g of compost. The plants received the same amount of water and sunlight each day. The group recorded the height (cm) of the plants each day for 7 days.

ANSWER:

The Effect of Recycled Product on Plant Growth (cm)

	Flat A (3mo)			Flat B (6mo)			Flat C (none)		
	Plant 1	Plant 2	Plant 3	Plant 1	Plant 2	Plant 3	Plant 1	Plant 2	Plant 3
Day 1	1.0	0.8	1.1	1.0	0.8	1.1	1.0	1.0	1.0
Day 2	2.1	2.0	1.8	2.1	2.0	1.6	1.6	1.5	1.4
Day 3	4.0	4.3	3.6	3.0	3.3	2.2	2.2	2.3	2.4
Day 4	6.2	6.0	5.0	4.2	4.0	2.7	2.7	2.6	2.9
Day 5	9.0	9.2	7.5	5.0	5.2	3.1	3.1	3.2	3.5
Day 6	11.5	11.3	9.1	6.5	6.3	4.0	4.0	3.9	3.8
Day 7	14.1	13.6	10.0	7.2	6.8	4.6	4.6	4.5	4.3

REASONING: Sometimes, data tables need to look different because you are measuring something on a daily/weekly/biweekly basis. In this case, you measured daily for a week! Each flat represents a level of the IV (the age of the compost), the 3 plants in each flat represent the 3 trials, and your empty boxes would be filled with your DV!!!