Name: _____ Block: _____

CHEMISTRY

Accuracy and Precision

Look carefully at the measurements. Decide if the measurements are Accurate only, Precise only, Both accurate and precise, or Neither. Use only the letters as answers. Type the letters on the line next to the question number.
Accurate only: **A** Precise only: **P** Both: **B** Neither: **N**

Mr. Jones got a python. He brought it to school to show his students. The python was very long. Five classmates measured the length of a python with a flexible tape measure. The true length (true value) of the python was **500 cm**. The classmates collected and shared the following measurements shown to the right.

	Measured length of the Python (cm)				
Kayla	472	480	474	475	471
Tyrone	292	356	310	400	377
Ralph	498	501	500	502	504
Mark	537	541	538	538	540
Lena	516	506	488	504	491

_____ 1 Kayla

_____ 2 Tyrone

_____ 3 Ralph

_____ 4 Mark

_____ 5 Lena

Look carefully at the measurements. Decide if the measurements are Accurate only, Precise only, Both accurate and precise, or Neither. Use only the letters as answers. Type the answer on the line next to the question number.
Accurate only: **A** Precise only: **P** Both: **B** Neither: **N**

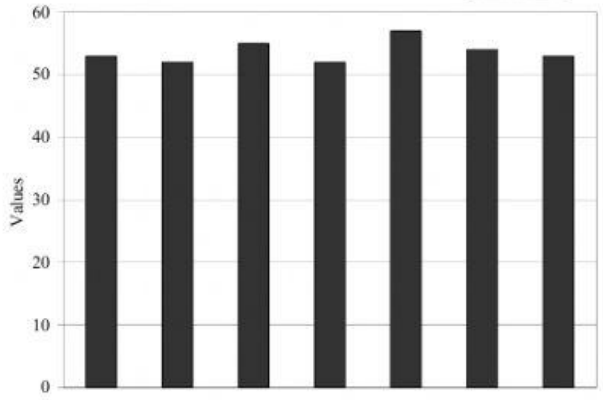
	True value	**Measurements**
_____ 6	45	37, 40, 39, 45, 49, 41
_____ 7	250	244, 249, 251, 248, 252
_____ 8	30	25, 28, 33, 35, 31, 26
_____ 9	150	187, 165, 134, 177, 142

LIVEWORKSHEETS

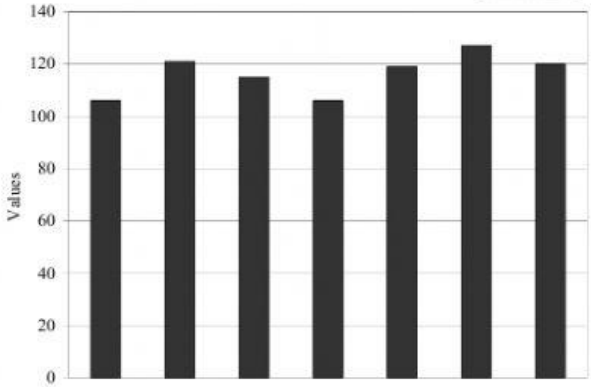
		True value	Measurements
_____	10	50	55, 57, 58, 55, 57, 56
_____	11	50	39, 21, 25, 33, 34, 26
_____	12	50	56, 51, 54, 45, 43, 54
_____	13	50	51, 53, 50, 51, 50, 49
_____	14	300	221, 289, 277, 256, 265, 240

Look carefully at the graphs. Decide if the measurements are Accurate only, Precise only, Both accurate and precise, or Neither. Use only the letters as answers. Type the answer on the line next to the graph.
Accurate only: **A** Precise only: **P** Both: **B** Neither: **N**

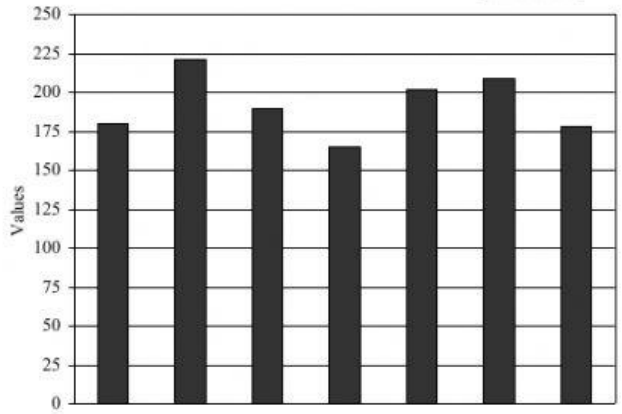
15. The true value is 45. _____



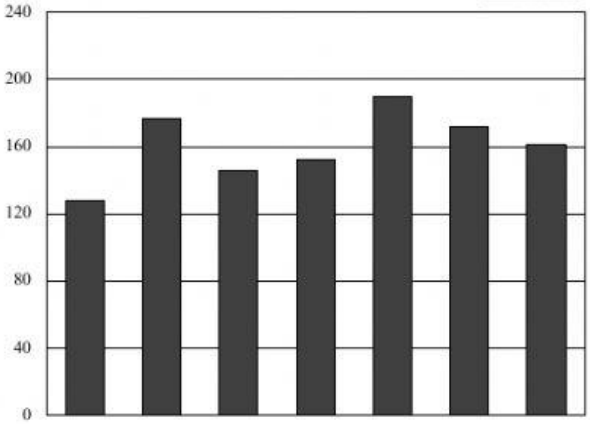
16. The true value is 115. _____



17. The true value is 150. _____



18. The true value is 200. _____

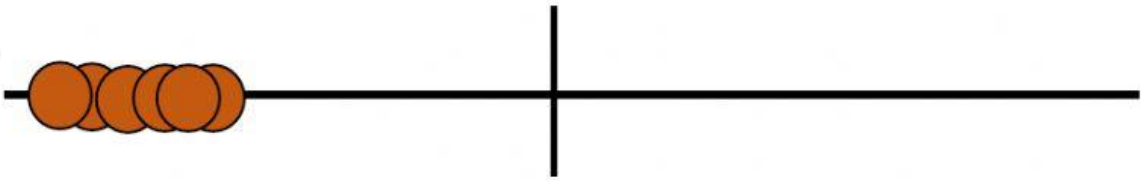


LIVEWORKSHEETS

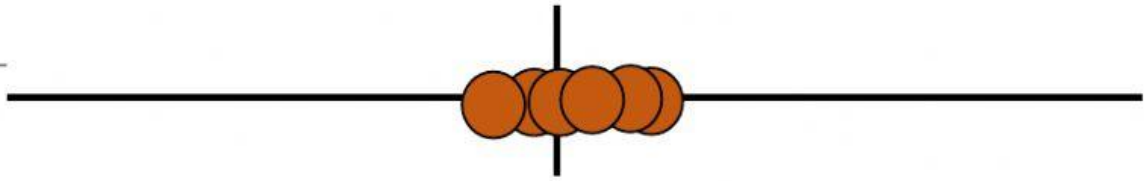
The brown circles are measurements collected during an experiment. The vertical line represents the true answer or true value. Decide if the measurements are Accurate only, Precise only, Both accurate and precise, or Neither. Use only the letters as answers. Type the answer on the line next to the graph.

Accurate only: **A** Precise only: **P** Both: **B** Neither: **N**

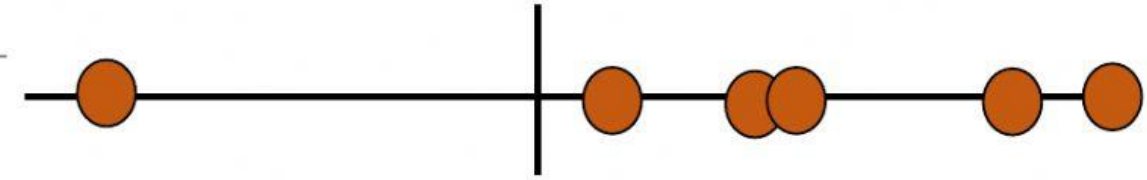
19. _____



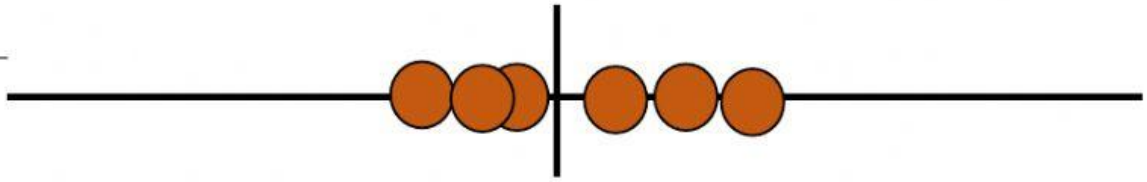
20. _____



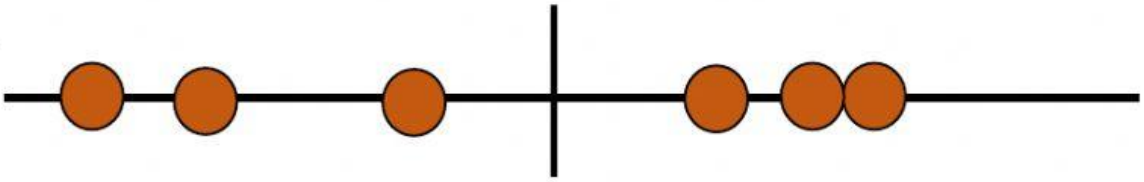
21. _____



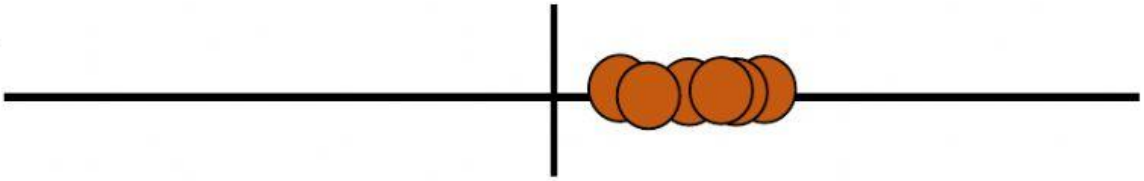
22. _____



23. _____



24. _____



LIVEWORKSHEETS