Assignment 3E – Average Atomic Mass

20 Points

Solve the following atomic mass questions, showing work (as shown in class).

1. A local ice cream shop sells the following sizes of sundaes:

Size	Small	Medium	Large	X-Large
Cost	3.00	4.50	6.00	7.50
% Sold	32%	18%	21%	29%

Using the data in the chart above, find the average price for a sundae from the shop.

2. A pizza shop sells the following sizes of pizzas

Size	Small	Medium	Large	X-Large
Cost	10.00	12.00	15.00	19.00
% Sold	5%	60%	27%	8%

Using the data in the chart above, find the average price for a pizza from the shop.

3. Lithium has two isotopes, Li-6, and Li-7 shown in the chart below:

Isotope	Mass	% _{abundance}
Li-6	6.00amu	7.59%
Li-7	7.00amu	92.41%

Find the average atomic mass for lithium

4. Boron has two isotopes, B-10, and B-11 shown in the chart below:

Isotope	Mass	% _{abundance}
B-10	10.00amu	19.9%
B-11	11.00amu	80.1%

Find the average atomic mass for boron.

5. Magnesium has three isotopes, Mg-24, Mg-25, and Mg-26 shown in the chart below:

Isotope	Mass	%abundance
Mg-24	24.00amu	78.99%
Mg-25	25.00amu	10.00%
Mg-26	26.00amu	11.01%

Find the average atomic mass for magnesium

6. Potassium has three isotopes, Mg-24, Mg-25, and Mg-26 shown in the chart below:

Isotope	Mass	%oabundance
K-39	39.00amu	82.99%
K-40	40.00amu	6.01%
K-41	41.00amu	11.00%

Find the average atomic mass for potassium