

Periodic Trend Data Table-Standard 1 Activity

| Sym bol | Atomic # x-axis | Atomic Radius (nm) x 10³ y-axis | Per iod | Group | Sym bol | Atomic # x-axis | Atomic Radius (nm) x 10³ y-axis | Per iod | Group |
|--------------------|--------------------------------|---|--------------------|--------------|--------------------|--------------------------------|---|--------------------|--------------|
| H | 1 | 37 | | | | 19 | 231 | | |
| | 2 | 50 | | | | 20 | 197 | | |
| | 3 | 152 | | | | 21 | 160 | | |
| | 4 | 111 | | | | 22 | 146 | | |
| | 5 | 88 | | | | 23 | 131 | | |
| | 6 | 77 | | | | 24 | 125 | | |
| | 7 | 70 | | | | 25 | 129 | | |
| | 8 | 66 | | | | 26 | 129 | | |
| | 9 | 64 | | | | 27 | 125 | | |
| | 10 | 70 | | | | 28 | 124 | | |
| | 11 | 186 | | | | 29 | 128 | | |
| | 12 | 145 | | | | 30 | 133 | | |
| | 13 | 143 | | | | 31 | 122 | | |
| | 14 | 117 | | | | 32 | 122 | | |
| | 15 | 110 | | | | 33 | 121 | | |
| | 16 | 104 | | | | 34 | 117 | | |
| | 17 | 99 | | | | 35 | 114 | | |
| | 18 | 94 | | | Kr | 36 | 109 | | |

Fill in the table of all missing values.

Periodic Trend Data Table-Standard 1 Activity

Graph the following table Atomic Radius vs. Atomic #

1. Label the X and Y axes. Be sure to include the units of each axis.
2. Title your graph: Y-axis vs. X-axis.
 - a. Atomic Radius vs. Atomic #
 - b. Place title in an empty spot near the top.
3. Connect the line for Atomic #: Use different colors
 - a. 1-2
 - b. 3-10
 - c. 11-18
 - d. 19-36
 - e. Place a legend box in an empty space to denote the different line color.

Questions:

1. What period is line 1-2?
2. What period is line 3-10?
3. What period is line 11-18?
4. What period is line 19-36?
5. What is the general trend in the periodic table as the atomic number increase relative to atomic radius? Use a paragraph (5-sentences & use supportive facts) to answer this question. You can use your text to help you.