

STUDENT INVESTIGATION

Activity:

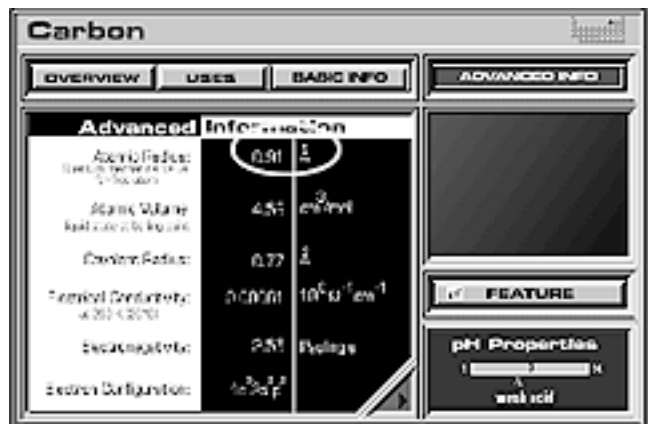
Exploring Atomic Radii Changes

Purpose:

To find and explain how the atomic radius changes within a group.

Materials:

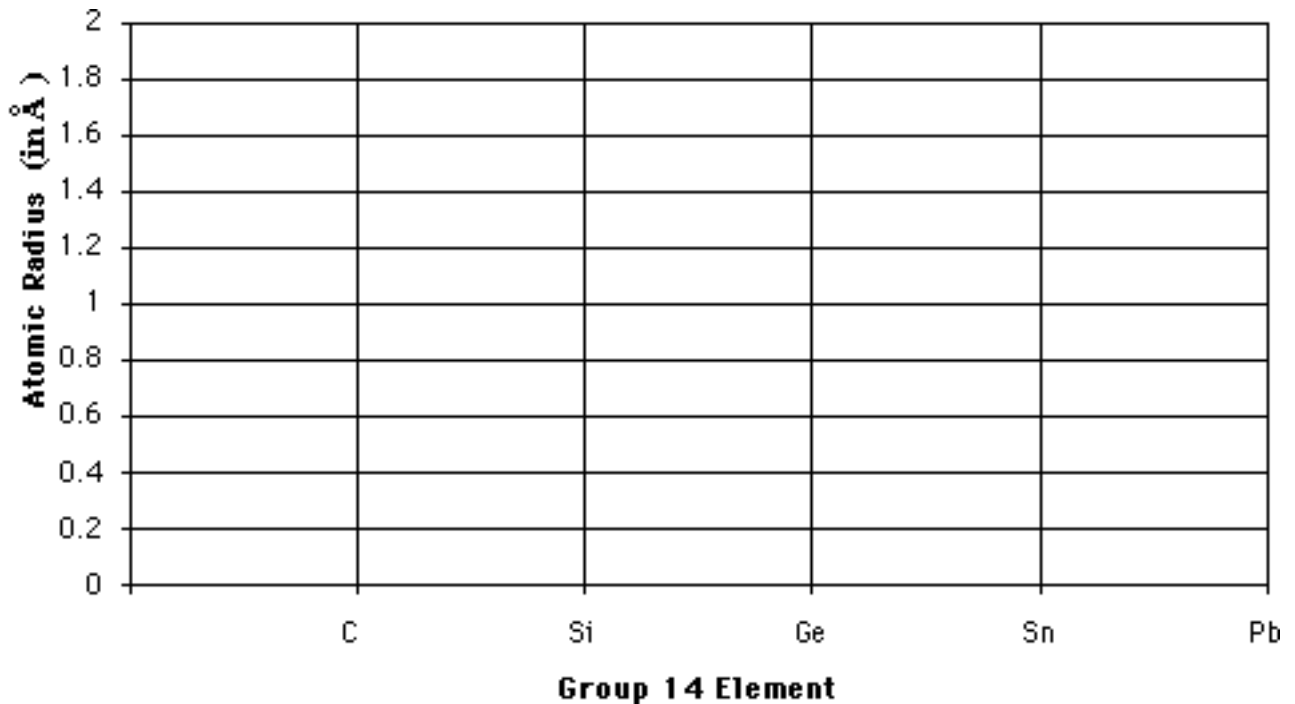
DTE CD-ROM, Computer with CD-ROM drive



Procedure:

1. Find Group 14 of the Periodic Table. Make a list of the elements in Group 14.
2. Find the **Atomic Radius** of each element in Group 14 by looking up this value in each element's *Advanced Info* section of *Discover the Elements*.
3. On the graph provided below, plot the atomic radius value for each element, and draw a line graph connecting the points.

Data:



Data Analysis: State the trend you notice for atomic radii as you go down the group.

Conclusion: Explain the trend you observe on your graph in terms of the atomic structure of the elements in Group 14 of the Periodic Table.