Chapter 9 BS

What determines the shape of a molecule?

What are the options for the shape of a molecule with the form of AB_2? Draw and label an example of both.

What are the options for the shape of a molecule with the form of AB_3? Draw and label an example of each.

Briefly explain the VSEPR model in your own words.

In the VSEPR model with balloons, what did each balloon represent?

Draw and label the 5 basic shapes of electron domain geometry.

Explain the difference and similarities of molecular geometry and electron domain geometry.

What are the three steps for using the VSEPR model?

Work through an example labeling each step on the way.

Explain the effect of nonbonding pairs of electrons on bond angles.

Give the two general rules of electron domain repulsion given on page 353.

Use the VSERP model to predict the molecular geometry of SF_4 and IF_5.