Perfectly Comfortable Piglets Answer Guide

Piglets are 2 inches wide and 6 inches long at birth. Each piglet should be allowed 12 square inches of mat space. On the grid, a pig can be represented by a two-block by six-block rectangle. Use piglet cutouts to arrange the piglets on the grid. To be comfortable, the pigs must not overlap.

- All piglets whose noses have two positive coordinates should lie parallel to the *x*-axis.
- All piglets whose noses have two negative coordinates should lie parallel to the *y*-axis.

Once you determine the proper location of each piglet, check with your teacher to verify that the piglets are correctly positioned. Then, glue or tape the piglets onto the grid.

1. To avoid overlapping, piglets whose noses have a positive *x*-coordinate and a negative *y*-coordinate lie parallel to which axis?

They lie parallel to the *x*-axis

2. To avoid overlapping, is there a rule for the position of piglets whose noses have a negative *x*-coordinate and a positive *y*-coordinate?

Either direction seems to work.

3. Place the Heat Zone Grid on your piglets' grid. The background colors represent different heat zones. Are any of your piglets in more than one heat zone?

(Probably not)

These piglets are comfortable. Comfortable piglets have room in front of their noses so they can breathe. They have room to stretch or roll. They are warm enough not to pile on one another and cool enough not be stretched out at the edges of the mat trying to cool off.