Interdisciplinary Application LESSON 3.1

For use with the lesson "Plot Points in a Coordinate Plane"

Mammals

Biology Cows, dogs, humans, and lions are all mammals. Mammals are different from most other types of animals in five ways.

- Mammals have hair at some time in their lives.
- · Mammals are warm-blooded. This means that the body temperatures of mammals are about the same all of the time, even though the temperature of their environment changes.
- Mammals have brains that are larger and better developed than other animals.
- Mammals train and protect their young more than other animals.
- Mammals nurse their babies. ٠

Before a mammal can nurse its baby, the mother carries its unborn young while it develops from conception to birth. This is called the gestation period. The length of the gestation period differs with the species, and may even vary with individual births of the same animal. The following table shows a mammal, its average gestation period (in days), and the average birth weight (in pounds).

Mammal	Cow	Dog	Elephant	Giraffe	Horse	Human	Lion	Mouse	Rabbit
Average gestation period (days)	284	61	641	410	337	267	108	19	31
Average birth weight (pounds)	50	0.5	243	132	50	7.5	3.5	0.0025	0.125

- 1. Graph the function represented by the table for the average gestation periods and the average birth weights for the nine mammals. Use the horizontal axis to represent the gestation period.
- What is the heaviest average birth weight shown in the graph? What is the lightest? 2.
- **3.** Describe the relationship between the average gestation period and the average birth weight.