

MATH 246

Sets and Venn Diagrams

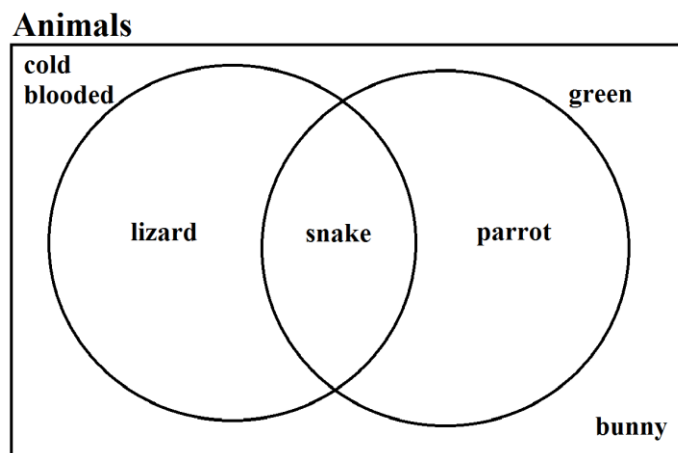
Some answers to the in-class activity:

1. Set 1 = things that are hot; Set 2 = things that are yellowish
The sun is hot and yellowish.

2. Can you really claim the checkerboard belongs in a set called, “things that are black”? This is debatable because *What constitutes something that is black?* A **black** sweatshirt with **red** writing might be called “**black**” but a **red** sweatshirt with **black** writing probably wouldn’t be called “**black.**” Hence this whole dilemma. This situation can be easily resolved by renaming A = things that contain black and B = things that contain white. Now the checkerboard makes sense as a member of each set (and its intersection).

3. Many answers are possible.

4. Here is a nice one:



5. Universe is people | larger set: people from Russia | subset: people from St. Petersburg
Explanation: The people from St. Petersburg are from Russia but there could be a person from Russia who is not from St. Petersburg.

6. Universe is toys | set 1: toys for ages 3 and up | set 2: toys for ages 0-6 months
Although an older child could play with a 0-6 month toy, no toy could fall into both categories.