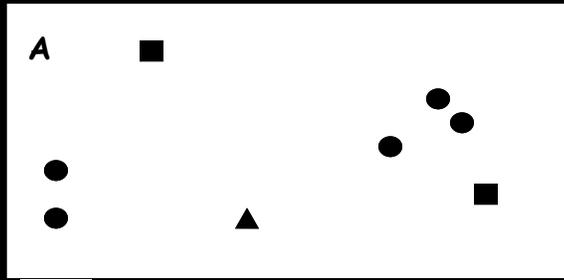
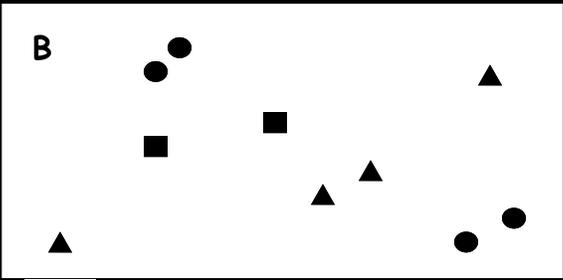
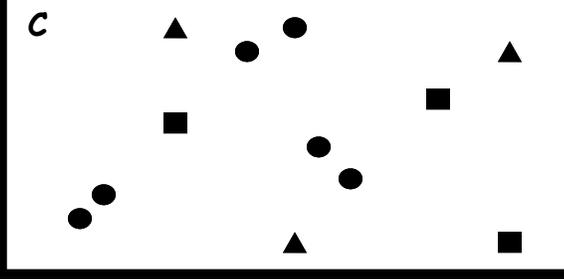
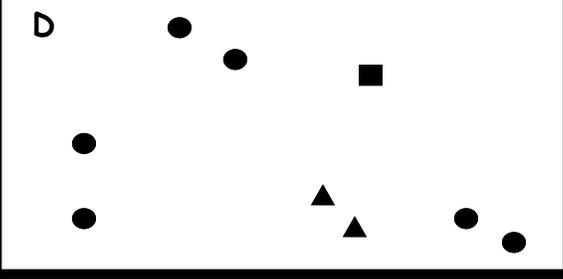


Counting Birds

The Okefenokee is big, covering over 650 square miles (about 300,000 football fields). In such a large area, it is impossible to count every bird, so biologists will use math to estimate bird populations. In this activity, a biologist has flown over a refuge prairie in a helicopter and marked on the rectangles below the location of three types of birds.

A 	B 	<p>Great Blue Heron ■</p> <p>Sandhill Crane ●</p> <p>White Ibis ▲</p>
C 	D 	

Count how many Sandhill Cranes and White Ibises are in each of the four squares. Write these numbers in the table below. Then add all four squares together to find the total number of each species.

Species	Square A	Square B	Square C	Square D	Total
G.B. Heron	2	2	3	1	8
Sandhill Crane	5	4	6	6	21
White Ibis	1	4	3	2	10

What fraction of the total number of White Ibises are in Square B? (Divide the number found in Square B by the total number) **4/10 or 2/5** Square D? **2/10 or 1/5**

Count the number of Sandhill Cranes in Square A. Multiply this number by four to estimate the number of cranes in all four squares (the whole prairie).

$$5 \text{ cranes in Square A} \times 4 = 20$$

Biologists use this method, called sampling, to estimate the number of animals in an area without having to count every animal.

Now count the number of cranes in all four squares: **21** cranes. What is the difference between the numbers? **21 - 20 = 1.**

Was your estimate close to the actual number of cranes? **YES**

