ABSTRACT:
To answer the question of whether bird sightings depend on the
time of day, I observed birds in my backyard over a period of 5 days. I
watched for twenty minutes from 0640-1000 hours and later from
1730-1750 hours. I hypothesized that more birds would be seen in
the morning than in the evening. Supported by my data, my
hypothesis proved correct. By taking the average of the total number
of birds seen in the morning and total number of birds seen in the
evening, it was noticed that there are twice as many birds present in
the morning than in the evening.

HYPOTHESIS:
If the time of day affects bird sightings, and I observe birds in
the morning and again later in the evening, then I will see more birds
in the morning.

PROCEDURE:
1. Select an area where birds are easy to see and where birds
frequently visit. Make a circle around yourself with a radius of
approximately 20 yards (the circle can be marked or
remembered in your head). Any bird that comes in this circle
will be counted.
2. Gather up the necessary materials: binoculars, pencil,
3. At 0640 hours, go to the chosen area with all materials and
record all birds seen, following proper field note taking
procedure:
   - at the top of the page record date, location, time (in
     military units) and current conditions (weather,
temperature, cloud coverage)
   - write the name of each species and use tally marks for
     the individuals sighted. For flocks, write the number
     of birds in the flock with a circle around it
   Stop recording after 20 minutes, or at 1000 hours.
4. At 1730 hours (preferably the same day) go to the same spot
and bird watch again, following the same note taking
procedure. Stop after 20 minutes or at 1750 hours.
5. Repeat steps 3 and 4 for four more days.

ANALYSIS:
After observing birds in my backyard for 5 days and 5 nights, I
have noticed an imbalance between the number of birds I saw in the
morning and the number of birds seen in the evening. On the
average, twice as many birds were seen in the morning than in the
evening. This supports my own hypothesis, which stated that more
birds would be seen in the morning. The null hypothesis (which states
that the groups of birds seen in the morning and in the evening are
actually the same birds) is accepted at the p<0.1 level of significance.
I agree with the null hypothesis because these birds have stationary
nests and they will be returning to them at the end of the day, so it's
very likely that a bird I see one morning will be the same bird I see
that evening, and possibly the next morning.
Does the type of bird feeder affect the number of birds that visit the feeder?

**Hypothesis**
The type of bird feeder does affect the number of bird visits.

**Procedure**
1. Obtain 2 different styles of bird feeders.
2. Place the same kind of bird food in each feeder (fill to the top).
3. Find a tree that is tall enough to support 2 bird feeders.
4. Hang each bird feeder 5 1/2 feet from the ground, open to birds, and an opposite side of the tree.
5. Count how many birds (any species) visit each bird feeder in ten minutes. Conduct this count 7 times each week for 4 weeks. Remember to be quiet during timing.
6. Record data in a spreadsheet.

**Conclusion**
After observing the different bird feeders, I found that visits to different types of bird feeders in the backyard varied. The type of bird feeder does affect the number of bird visits. The type of bird feeder does affect the number of birds seen.
ABSTRACT

My project involves looking at two different Arizona habitats and determining if there is a significant difference in number of birds found in each. I conducted my experiment in the desert habitat of Mesa, Arizona and the forest habitat of Payson, Arizona. I used the same procedure to count birds in both places. I conducted four trials in both locations and analyzed my data to determine whether or not I accept the null hypothesis that there is no significant difference in number of birds between the two habitats.

HYPOTHESIS

In this experiment my hypothesis is the “null hypothesis.” In other words, I tested that there is no significant relationship between habitat type and number of birds found here in Arizona.

<table>
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<th>Trial</th>
<th>Desert</th>
<th>Forest</th>
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<td>13</td>
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<tr>
<td>4</td>
<td>12</td>
<td>11</td>
</tr>
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</table>

SUM  | 35     | 41     |
AVERAGE | 8.75  | 10.25  |
T-TEST | 0.628  |        |