Name: _____     Date: _____

# Predictions, Investigations, and Results: Why Do Orangutans Need So Much Forest Space?

**INVESTIGATION A**
**Why do orangutans need so much forest space?**

| Set-up and predictions | | |
|---|---|---|
| **Environmental conditions** | | |
| Area of forest | % of fruit trees | Number of termites |
| | | |
| **Predictions** | | |
| Do you think your orangutan will do about the same, better, or worse than the other orangutans? <br><br> Why? | | |

| Results | |
|---|---|
| **Individual results: Your orangutan's name: _____** | |
| What was the ending energy level for your orangutan? | What made it easier or harder for your orangutan to find food? |
| **Population results** | |
| What was the range of energy levels for the population at the end? | What was the average (mean) energy level for the population at the end? |
| Sketch the class histogram here: | |

| Making sense (individuals) | | |
|---|---|---|
| **Circle the claim you agree with.** | | |
| My orangutan was unsuccessful at finding food. | My orangutan was moderately successful at finding food. | My orangutan was very successful at finding food. |
| **Data from the investigation that support my claim:** | | |
| | | |
| **Factors that contributed to the outcome for my orangutan:** | | |
| | | |

| Making sense (population) | | |
|---|---|---|
| **Circle the claim you agree with.** | | |
| The orangutan population was unsuccessful at finding food. | The orangutan population was moderately successful at finding food. | The orangutan population was very successful at finding food. |
| **Data from the investigation that support my claim:** | | |
| | | |
| **Factors that contributed to the outcome for the orangutan population:** | | |
| | | |

## INVESTIGATION B
### What happens to the orangutans if there are FEWER fruit trees?

| Set-up and predictions | | |
|---|---|---|
| **Environmental conditions** | | |
| Area of forest | % of fruit trees | Number of fermites |
| | | |
| **Predictions** | | |
| Do you think your orangutan will do about the same, better, or worse than the other orangutans? <br><br> Why? | | |

| Results | |
|---|---|
| **Individual results: Your orangutan's name: _____** | |
| What was the ending energy level for your orangutan? | What made it easier or harder for your orangutan to find food? |
| | |
| **Population results** | |
| What was the range of energy levels for the population at the end? | What was the average (mean) energy level for the population at the end? |
| | |
| Sketch the class histogram here: | |

| Making sense (individuals) | | |
|---|---|---|
| **Circle the claim you agree with.** | | |
| My orangutan was less successful at finding food compared to *Investigation A.* | My orangutan was equally as successful at finding food compared to *Investigation A.* | My orangutan was more successful at finding food compared to *Investigation A.* |
| **Data from the investigation that support my claim:** | | |
| | | |
| **Factors that contributed to the outcome for my orangutan:** | | |
| | | |

| Making sense (population) | | |
|---|---|---|
| **Circle the claim you agree with.** | | |
| The orangutan population was less successful at finding food compared to *Investigation A.* | The orangutan population was equally successful at finding food compared to *Investigation A.* | The orangutan population was more successful at finding food than in *Investigation A.* |
| **Data from the investigation that support my claim:** | | |
| | | |
| **Factors that contributed to the outcome for the orangutan population:** | | |
| | | |

## INVESTIGATION C
### What happens to the orangutans if there are MORE fruit trees?

| Set-up and predictions | | |
|---|---|---|
| **Environmental conditions** | | |
| Area of forest | % of fruit trees | Number of termites |
| | | |
| **Predictions** | | |
| Do you think your orangutan will do about the same, better, or worse than the other orangutans? <br><br> Why? | | |

| Results | |
|---|---|
| **Individual results: Your orangutan's name: _____** | |
| What was the ending energy level of your orangutan? | What made it easier or harder for your orangutan to find food? |
| **Population results** | |
| What was the range of energy levels for the population at the end? | What was the average (mean) energy level for the population at the end? |
| Sketch the class histogram here: | |

| Making sense (individuals) | | |
|---|---|---|
| **Circle the claim you agree with.** | | |
| My orangutan was less successful at finding food compared to *Investigation A.* | My orangutan was equally as successful at finding food compared to *Investigation A.* | My orangutan was more successful at finding food compared to *Investigation A.* |
| **Data from the investigation that support my claim:** | | |
| | | |
| **Factors that contributed to the outcome for my orangutan:** | | |
| | | |

| Making sense (population) | | |
|---|---|---|
| **Circle the claim you agree with.** | | |
| The orangutan population was less successful at finding food compared to *Investigation A.* | The orangutan population was equally successful at finding food compared to *Investigation A.* | The orangutan population was more successful at finding food than in *Investigation A.* |
| **Data from the investigation that support my claim:** | | |
| | | |
| **Factors that contributed to the outcome for the orangutan population:** | | |
| | | |