Name\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_

Teacher\_\_\_\_\_\_\_\_\_\_\_\_

**Math Summer Project**

**100 Points**

**Welcome to Sixth Grade Honors Math! Summer is a great time to play outside while getting plenty of exercise. For your summer project, you will spend one week collecting data on the activities you do outside versus inside. Activities could include reading a book, helping with chores, swimming, playing with friends, etc. You may use the provided charts to track your activities or make some of your own.**

1. **Collect Data** for 1 week.

* Please record how you spend your time during the day for one entire week. One of your tracking tables should be how much time you spend outside. (e.g. riding a bike, swimming, playing with friends).
* Your other tracking table will be to record your inside activity time (e.g. chores, video games, watching a movie).
* Please include at least 5 activities or more (sleeping does **NOT** need to be included) for each chart. While tracking, please do forget to **name** each individual activity you are doing.

1. **Inside Week 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Activity  (List below) | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| **Ex) reading a book** | **60 min.** |  | **30 min.** |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

1. **Outside Week 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Activity  (List below) | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
| **Ex) Ride a bike** | **60 min** | **30 min** |  |  | **30 min** |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

1. **Organize**

Graph your data onto two separate bar graphs, one for the inside activities and one for the outside one. Your x-axis should be labeled with the activities you completed and the y-axis as the amount of time in minutes. You should have a bar representing each activity you spent time on during the week.

|  |
| --- |
| Inside Activities |

|  |
| --- |
| Outside Activities |

Make a double bar for each day of the week that you tracked. One bar will represent your total inside time for that specific day, and the other bar will represent the outside time for that day (e.g. Monday 130 minutes outside; 480 minutes inside). Label your x-axis with each day, and y-axis in minutes. You will need a total of 14 bars (7 days x 2 bars each).

|  |
| --- |
| Total Time Spent Outside and Inside Each Day. |

1. **Analyze** the data from your collection.

|  |  |
| --- | --- |
| Average inside time each day: | What activity did you spend the most time on inside? |
| Average outside time each day: | What activity did you spend the most time on outside? |

1. **Interpret** your data.

Observe your graphs. What activity did you spend the most time doing? What did you spend the least amount of time doing? What surprised you? What was the most frequent response? Analyze the data by describing what these values represent and summarize the data in four or five paragraphs.

**SCORING RUBRIC**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Excellent**  **(10 points)** | **Good**  **(5-9 points)** | **Poor**  **(0-4 points)** |
| **Data has been collected for two weeks** | At least 5 activities are listed and time is marked each day for 1 week. | 3-4 activities are listed and time is marked each day for 1 week. | 0-2 activities are listed and time is marked each day for 1 week. |
| **Bar graph for outside data** | A bar graph is made for the time spent outside, and the activities that were tracked for one week are displayed in a bar graph. The horizontal and vertical axes are labeled, and the bar graph is given a title. | A bar graph is made for the time spent outside, but some data are missing in the bar graph. No title is given. The axes are not labeled. | The bar graph is made, but several components are missing, or no bar graph is made. |
| **Bar graph for inside data** | A bar graph is made for the time spent inside, and the activities that were tracked for one week are displayed in a bar graph. The horizontal and vertical axes are labeled and the bar graph is given a title. | A bar graph is made for the time spent inside, but some data are missing in the bar graph. No title is given, and the axes are not labeled. | The bar graph is made but several components are missing, or no bar graph is made. |
| **Double Bar Graph for Daily Hours** | A double bar graph is made for the total time spent inside and outside for each day of the week. The horizontal and vertical axes are labeled and the double bar graph is given a title. | A double bar graph has been made for the total time spent inside and outside each day, but some data are missing. No title is given, and the axes are not labeled. | The double bar graph is made, but several components are missing, or no double bar graph is made. |
| **Analyze Data** | The four questions are answered accurately with the given data. | Two to three of the questions are answered accurately using the given data. | Less than two of the questions is answered accurately. |
| **Interpret Data** | Four to five typed or neatly written paragraphs are used to interpret the data. | Two to three paragraphs are written in messy handwriting to interpret the data. | Less than two paragraphs are written to interpret the data. |
| **Neat and Organized** | The final project is turned in with nice handwriting and straight lines. There are no rips or tears in the pages and everything can be easily read. | The final project is turned in with messy handwriting and smudge marks. Rulers were not used when making the bar graphs. | The final project is turned in with several rips or tears. The work is unreadable, and most of the work is not completed. |
| **Conceptual Understanding** | All questions of the project are answered correctly. Bar graphs are made, data are analyzed, and the student interprets the data. | Some questions of the project are not answered correctly. The bar graph may be missing some key components, and the data are not tracked correctly. | Several parts of the project are not answered correctly. The bar graphs are not done accurately, and the data were not tracked appropriately. |
| **Prepared** | This project was turned in by the due date. **(20 Points)** | This project was turned in 1-4 days late. **(1-19 points)** | This project was turned in 5 or more days late. **(0 Points)** |
| Total: /100 | | | |