Solar system

1. Whether Pluto is a planet?

Q1: When was Pluto first found? When did astronomers start to claim that Pluto is not a planet in solar system?

Q2: Why isn’t Pluto a planet? How would you define a “planet”?

2. Period of revolution

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Radius(inch) | Number of spins | Time1 (s) | Time2(s) | Average time (s) | Time per spin |
| Trial1 |  |  |  |  |  |  |
| Trial2 |  |  |  |  |  |  |
| Trial3 |  |  |  |  |  |  |

What can you infer from the data you collected? What the relationship between radius and period in a circular motion? We know that the period of earth revolution is 365 days (a year). Please guess what the revolution period could be for Venus and Mars respectively?

3. The distance of planets

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Length of the box (length, inch) | Distance between the light bulb and the whole on the box(distance, inch)  | Diameter of the light spot (diameter, inch) | Calculation $$\frac{Diameter×Distance}{Length}$$ |
| Trial1 |  |  |  |  |
| Trial2(move the box away or toward the light bulb for a certain distance) |  |  |  |  |

After each trial, measure the size of the light bulb (diameter, inch). Compare the value of size with the result of your calculation. What can you infer? Do you know how astronomers measure the size of planets now?

4. Draw graphs to show the light and dark parts on each globe.