<http://www.glencoe.com/sites/common_assets/science/virtual_labs/E12/E12.html>

Use the web address above to complete the table and answer the questions below. The procedures are located on the left of the virtual lab. Read through the introduction and scroll down to find the procedures.

1. What does *d, v*, and *t* stand for in the formula *d=vt?*
2. By either using the triangle method or algebra, Solve for distance and record findings in the table below…

|  |  |
| --- | --- |
| Car Color | Calculated distance |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

1. Answer the following questions before you begin the activity…
   1. Which car do you predict will travel the shortest distance and why?
   2. Which car do you predict will travel the longest distance and why?
2. Round 1:
   1. Choose three cars from the selection provided and record the color of each car in the table below ‘car color’. (Purple, red, yellow, green, or blue)
   2. Record their average speed and the time they will be traveling their average speeds.
   3. Using the formula, d=vt calculate the distance each car should travel.
   4. Move the chosen cars to behind the starting line and then press go.
   5. Record their actual distance.
3. Round 2:
   1. Choose the three fastest cars. (Yellow, red, & green/purple) and record their average speeds, time they will travel, and calculate their distance they should travel.
   2. Place them behind the line and press go.
4. Round 3:
   1. Choose the three slowest cars. (blue, green, & purple) and record their average speeds, time they will travel, and calculate their distance they should travel.
   2. Place them behind the line and press go.

DATA SHEET

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Car Color | Average Speed  Meters/second) | Time (seconds) | Calculated distance | Distance = Average Speed x Time (meters) |
| Round 1 | | | | |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Round 2 | | | | |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Round 3 | | | | |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

1. Using the Graphs provided below, record Compare the speeds of the cars from each round…





