

Lesson 4: Testing the Motion of Vehicles Carrying a Load

1. What did you observe when testing the various loads (blocks)?
2. How did the vehicle move when it was loaded with two blocks?
3. How did the motion of the vehicle change when you removed one block? How did it change when you removed both blocks?
4. What do you think would happen if you added a third or fourth block to the vehicle?
5. When the vehicle carried no blocks, what was left to influence its motion?
6. What can you conclude about the effects of load (such as blocks) on a vehicle's motion

Record Sheet 4-A

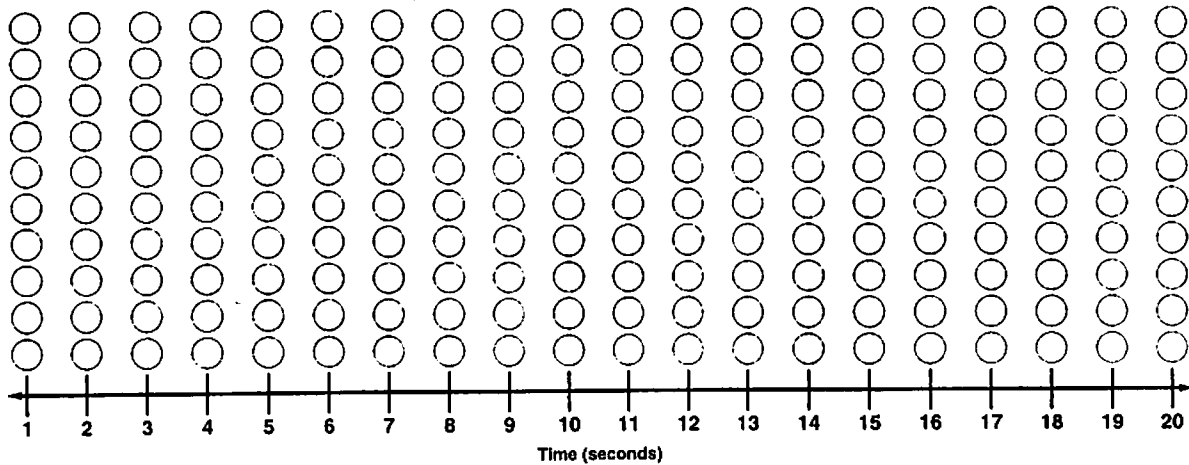
Names: _____

Date: _____

STC / Motion and Design

Graphing Data: How Load Affects the Time a Vehicle Travels

Number of washers we will use: _____



Red dots, vehicle only

Blue dots, vehicle + 1 block

Green dots, vehicle + 2 blocks

Now look at your dots. About how long did it take your vehicle to travel while carrying each of the following loads? (Pick the number in the middle of your five trials, or the number that has the most dots of one color.) Record the numbers below.

Vehicle only (red dots) _____ seconds

Vehicle + 1 block (blue dots) _____ seconds

Vehicle + 2 blocks (green dots) _____ seconds