Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tire Track Evidence Lab

Directions: Your group’s job will be to identify tire tracks and match them to the vehicles provided.

Materials: Blank Tire Track Challenge Sheet, Matchbox or Hot Wheels cars , Ink Pad, A copy of Tire Tracks worksheet, Ruler, Paper towels.

Procedure:

1. Write down distinguishing characteristics about the vehicle at your desk and write them next to the vehicle number on a separate piece of blank, non-lined paper.
2. Gently roll a vehicle over the ink pad several times to cover all the sides of the tires.
3. Gently roll the vehicle on the paper for a length of the paper. You will want to apply enough pressure to get a good impression, but not too hard that you damage the vehicle, its tires, or the ink pad.
4. Roll the vehicle on a piece of paper towel to remove excess ink and pass it along to another group. You will need to print 7 vehicles. Leave spaces between marks for observations.
5. Analyze the tire tracks to identify unique characteristics, such as blank spots, evidence of tire wear, etc. Write these characteristics next to or under the tire tracks for each of the 7 cars.
6. Obtain an evidence sheet from your teacher. Do not write on the evidence sheet.
7. Work with your group to identify each set of tracks shown on your evidence sheet. Compare the tracks your group made and match them to the worksheet handed out by the teacher.

Questions:

1. Which vehicle number matches tire print A?
2. Which vehicle matches tire print B?
3. Did the same student commit the crime?
4. Are tire prints class or individual evidence? Explain your answer.
5. Can or should a prosecutor be able to convict an individual based only on tire prints? Explain your answer.

Tire Track Evidence

Someone drove circles through Ms. Butler’s and Mr. DiGiacomo’s yards leaving the following notes. It occurred late at night but Mr. DiGiacomo was up all night working on physics formulas and happened to catch a WFHS student parking sticker on the car as it sped away. Police have looked into it and have narrowed down the tire tracks to seven vehicles that were parked in the school’s student parking lot. Below are the pictures of the yards. Police believe, due to the nature of the crime, the fact that it happened on the same day, and that ransom notes were left, that the crime was committed by the same person in each location.

Hey Mr. D-

I hate chemistry and your face!

Ms. Butler:

Let us wear Halloween costumes to school or else!

Ms. Butler’s yard:

Mr. DiGiacomo’s yard: