[redacted]

2/20/13
Period 5

BLUE TRACK INVESTIGATION
Groups of **FOUR** with someone new

- USING A Piece of Blue TRACK AND TWO CANS + 1 BALL

- Convert The following GRAPHS TO TRACK SETUPS AND Justify why This SETUP MAKES The objects speed CHANGE LIKE The GRAPH

Speed GRAPHS

Blue Track Continued

Acceleration

Set up the track to make the objects acceleration match the graph again. Justify your set up. Use images of the setups to prove your conclusions

ACC Graphs

1

2

3

4

5

This will be hard!!!

Blue Truck [redacted]

Investigation

2/14/13

Period 5

1.

This track was a straight with a little curve and gravity causes the car to speed up. The applied force increases.

2. The speed slows down due to the friction force

3.

A slight bend of the track helped the car move at a constant speed.

4.

The car remains constant, but the drops in the track decreases the speed of the car. The friction force overcomes the applied force and helps the speed decrease.

5.

The steepness of the track helps the speed increase. The applied force overcomes the friction force. Where the track is constant, the applied force and friction force are equal.

6.

The speed decreases up the track and speed increases downward. The applied force is greater as the car speeds up to the top. It remains constant at the top of the track.

7.

The applied force began at the drop of the track. The speed increased. As it sped up the drop on the track, the friction force increased.

Acceleration

1.

The car's speed is accelerating at a constant speed. The track has a slope and no changes in the track were made.

2.

The track has a drop which makes the speed increase. As the car moves down, it accelerates at a constant rate.

3.

The applied force makes the car accelerate faster. The car moves at a faster speed as the track slopes down.

4.

The car remains at a constant speed while dropping. Once it hits the curve, the acceleration changes. Then, once the car passes the curve the acceleration is constant again.

5.

The car remains at a constant speed on the beginning of the track. Then, the car changes acceleration as it moves down the curve and the car changes acceleration again as the track flattens out.