Physics Internet Scavenger Hunt

Name_____

For each site below log on to sciencespot.net/ click the Kid Zone graphic to find the Physics links and begin your hunt for information.

Site Name: Amusement Park Physics is found under motion and forces

1. Which horse on a carousel are moving the fastest: the ones on the inside or the ones on the outside? Explain your choice.

2. Which Law of Motion explains what happens during a ride on the bumper cars? Give an example.

3. Where do riders have a feeling of "weightlessness" on a pendulum-type ride? At what point on the pendulum-type rides do riders feel the highest g-forces?

4. Explain the "weightless water" trick. Hint: go to the Free Fall section.

5. Out of the 270 million people who visit amusement parks annually, how many require a trip to the emergency room?_____ What is the percentage? _____

Site Newton's Law

A. Give an example of Newton's 1st Law of Motion.

B. What formula is used to show Newton's 2nd Law of Motion?

C. Explain Newton's 3rd Law of Motion.

Site: Funderstanding

Figure out a way to make the roller coaster work. What is the coater's top speed? _____

What causes the roller coaster to go faster and still stay on the track? _____ What happens when friction is added?

How fast did you make the roller coaster go and still stay on the track?

How slowly could you make the roller coaster go and still stay on the track?

Site: Sport Science

A. Why are hockey skates sharpened the way they are?

B. Explain the science behind the “Ollie” in skateboarding.

C. How much force does it take to break a hockey stick?

D. Who is credited with developing the chain drive (chain and cog system) for bicycles?

Site: Fear of Physics

Click on Visual Physics

Click on three of the links and explain what you learned. (The collision site is fun)

1.

2.

3.