

Dear Family,

In my class today we experimented with how wheels move.

Did You Know?

- Millions of people use cars as a means of transportation every day. Many vehicles, including all cars, have wheels. The wheels rotate and move what they are connected to – a wagon, a car, a bike, a bus, or a skateboard. Wheels move faster and more easily on a smooth surface than they do on a bumpy or textured surface. For example, cars would go really fast on ice and would go more slowly when driving on sand. Why does this happen? This happens because when wheels roll along a surface, they cause friction. Friction is what occurs when you rub two surfaces against each other.
- When a surface is smooth, there is less friction between a wheel and the surface. When a surface is rough, there is greater friction between a wheel and the surface. Greater friction makes it more difficult for wheels to turn on a surface. When we experiment with different textures, we are testing to see how much friction is between a wheel and a surface.

Ask Your Child:

- How did you use aluminum foil, bubble wrap, and felt today?
- What did you do with toy vehicles and ramps?
- How did the aluminum foil feel? How did it affect the speed of the vehicles?
- How did the texture of the bubble wrap feel? How did it affect the way the vehicles rolled?
- Did the vehicles travel faster on the felt, aluminum foil, or bubble wrap? Why?
- Did all the vehicles go down the ramps the same way? Why not?

Activities To Do With Your Child:

- Look around your house for any toys that have wheels. Collect the toys and look at them together. Do all of the toys have the same number of wheels? Are the wheels the same size on all of the toys? Have some races between the different toys. Which vehicles are the fastest? Which vehicles are slow? Why? Make some ramps for the toys using a piece of cardboard or the lid from a puzzle or game. Do the vehicles move faster on the ramp?
- Walk around your neighborhood and look at the wheels on different cars and trucks. How are the wheels different and how are they the same?

Vocabulary To Use With Your Child: ramp, vehicle, roll, speed, texture, friction