# **SITUATION 1**

Take a look at the video Chris Running at mrmont.com.

The average person on the street thinks you push yourself forward when you run.

Which way are your feet really pushing the ground?

What must be pushing back?



## **SITUATION 2**

Take a look at the video Swimming at mrmont.com.

The average person on the street thinks you swim by pushing yourself forward.

Which way are your hands really pushing the water?

What must be pushing back?



# **SITUATION 3**

Take a look at the video Tires at mrmont.com.

The average person on the street thinks that vehicles work by the tires pushing forward.

Which way are the tires really pushing the ground?

What must be pushing back?



#### **SITUATION 4**

Take the rev-up car, rev it up and put it on the table.

The average person on the street thinks that this toy works by the tires pushing forward.

Lay down the pencils all lined up. Put the cardboard on top. Rev up the car and put it on the cardboard.

Which way are the tires really pushing the ground?

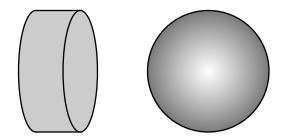
What must be pushing back?



# **SITUATION 5**

The average person on the street thinks that magnets pull steel.

Try holding the steel marble in one hand and the magnet in the other. Bring them close (but hold tight!). Who is pulling whom?



## **SITUATION 6**

The one Pasco Cart has a spring-loaded plunger. The other does not.

Push in the plunger in. Place the carts next to each other in the middle of the track.

Use the ruler to hit the pin to trigger the plunger.

Clearly the cart with the plunger pushes on the cart without the plunger. What else happens?

