THE AWARD-WINNING PRINT & ONLINE FAMILY FEATURE Find Kid Scoop on acebook

CIENCE RACING O F

Compare these two gravity race car ramps. Ramp A has a **smooth** Ramp B has a rough uneven surface. flat surface. On which ramp would a race car go faster?

When a car goes down a smooth surface like ramp A, it will travel more quickly because it has less surface friction.

Ramp B has a rough surface, which creates more friction when the car travels over it, making it go much slower than the car on ramp A.

What is friction?

Friction is what happens when two things rub against each other. Friction slows or stops moving things. A rolling ball eventually stops because friction between the ball and the ground brings it to a stop.

See Friction in Action!

Roll a ball from one end of a basketball court to the other. Pretty easy, right?

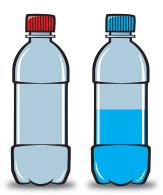
Now try to roll the basketball that same distance on

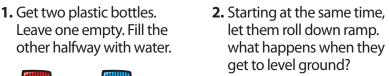
grass or gravel. Friction makes that a lot harder to do!

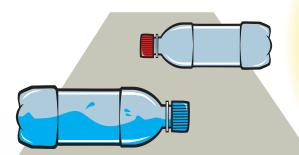
Have you ever fallen and scraped your knee? Ouch! Friction between the skin on your knee and the hard ground is what made it hurt!

The Great Bottle Race

Leave one empty. Fill the other halfway with water.







lonaer distance empty bottle rolls a down, while the Mhich will slow it causes friction, ground, the water boost. But on level water giving it a the weight of the faster at first due to water in it will travel The bottle with the

The word *friction* has more than one meaning:

Before racing down the drag

strip, drag racers complete a **burnout**, which spins the car's

wheels while the car stays still.

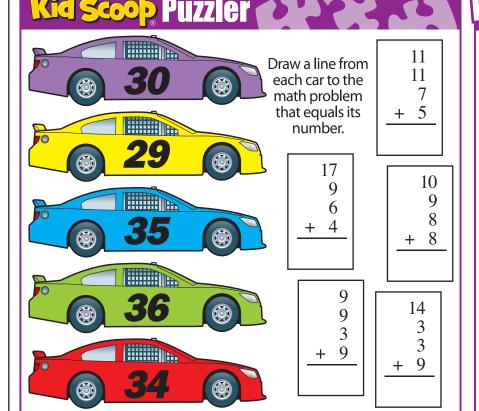
This causes the tires to heat up and smoke due to friction. Drag racing tires perform better at higher temperatures. A burnout is the quickest way

to raise tire temperature immediately prior to a drag race.

- **1.** The rubbing of objects together.
- **2.** The resistance an object encounters when moving over a surface.
- **3.** A disagreement between people or groups of people;

Look through the newspaper for examples or images that show one of the definitions of friction.

Standards Link: Research: Use the newspaper



FRICTION SCIENCE ROLLING RACING FASTER SMOOTH WHEELS RAMPS ROUGH SMOKE STILL **ROLL** DRAG **SLOW**

LESS

Find the words in the puzzle. Then look for each word in this week's Kid Scoop stories and activities.

FWFLLITSRI CHARTRAMPS IESOIANOSW HETMGCOKOO TLEAFITEHL OSRECNEICS ODROUGHFOA M S T E L S S E L N SRIROLLING

Standards Link: Letter sequencing. Recognized identical words. Skim and scan reading. Recall spelling patterns.

Kid Scoop Together:

Who will win the race?

Take a guess at which car will win the race and have a family member do it, too. Add up the numbers along each track. The car with the lowest number is the winning car. Circle the car that won.

That won.		
8	3	4
		•
6	5	2
2	2	5
5	9	6
7	7	1
,	•	
3	3	4
8	1	4
6	2	6
2	1	2
_		_
1	5	4
7	9	4
3	2	1
***	***	
TOTAL:	TOTAL:	TOTAL:

CYAN MAGENTA

Standards Link: Math: Number Sense:

This week's word: RESISTANCE

The noun **resistance** means a force that opposes or slows down another force.

The vitamins in fresh fruit helps build resistance to disease.

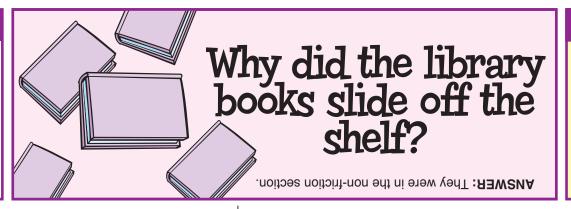
Try to use the word resistance in a sentence today when talking with your friends and family members.

LESSON LIBRARY

Science News

Look for three examples of newspaper articles related to science. Tell which science the article relates to. For example, a weather story is related to the science of meteorology.

Standards Link: Scientific Enterprise: Students know that although people using scientific inquiry have learned much, science is an ongoing process.



Invent the car of the future.

What would your car be able to do? What features would it have?