

## Classifying Types of Friction

**Friction is a force that opposes the motions of an object. Remember...**

- ◆ Friction produces heat.
- ◆ Friction can slow motion down and cause objects to wear down.
- ◆ Friction can be unwanted.
- ◆ Friction can be useful.
- ◆ Without friction there would be no stopping or changing direction of any motion. We have to have friction – but there are ways to overcome it.

### Types of Friction

**Static Friction:** Friction that acts on an object not in motion – anything at rest.

**Rolling Friction:** Friction that occurs when an object rolls across a surface on rollers, wheels, or ball bearing.

**Fluid Friction:** Friction that occurs when objects move through fluids.

**Sliding Friction** – Friction that occurs when an object slides across a smooth or slick surface.

Try to identify what type of friction is represented by each scenario below.

A book sitting on a table

Pushing a book across the table

A toy car rolling across the floor

Roller skating across a sidewalk

Canoeing down a river

Kayaking across a lake

