Practice Identifying One Main Learning Goal Forces

Use Analysis Guide A (Identifying One Main Learning Goal) to assess the quality of the following candidate learning goals.

One Main Learning Goal	Strong Learning Goal? Yes/No	Reasons
1. What is friction?	100/110	
Run a car down a ramp over three different surfaces and measure how far each car travels.		
Any change in the motion of an object— like speeding up, slowing down, or changing direction—is caused by a force acting on the object.		
4. Oil on a surface may reduce friction.		
5. Gravity		
The car went the farthest on the smooth tile surface and traveled the least distance on the carpet.		
7. Forces have both a strength and direction that can be represented by arrows of different lengths pointing in the direction of the force.		
Any object that isn't in motion must not have any forces acting on it.		
Describe the forces acting on an object moving in outer space.		
10. Friction occurs when bumps on the surfaces of two touching objects push against each other in the opposite direction of an object's motion.		