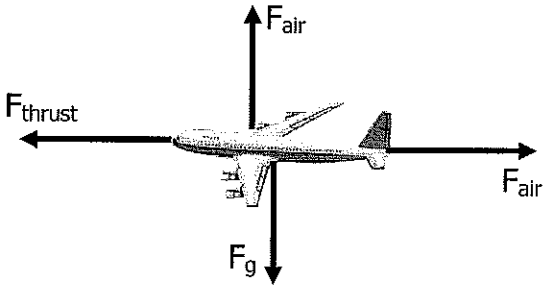
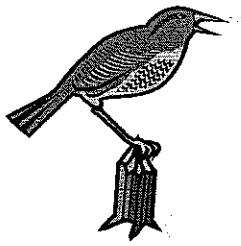
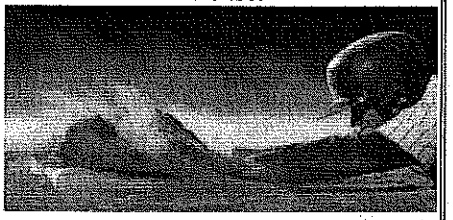
Physics

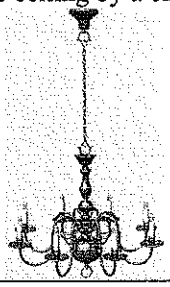
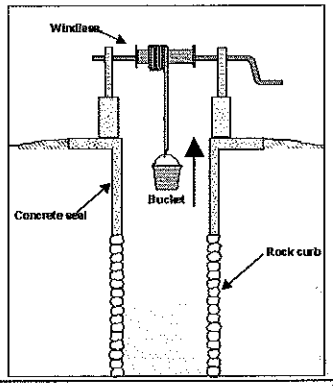
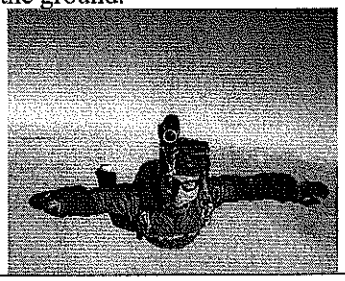
Force Diagrams Part 2

Name:_____ Block:_____

Recall that a Force Diagram is a sketch that shows all of the forces acting on an object. There are five basic forces that we have been working with: applied (F_A), friction (F_f), tension (F_T), gravity (F_g), and normal (F_N). In each of the scenarios below, read the situation and then draw a force diagram that shows all of the forces acting on the object. For example, an airplane is flying at a constant velocity in level flight. The force diagram would look like this:



1. A bird sitting motionless on a perch. 	Force Diagram:
2. Draw a force diagram for a hockey player, moving at a constant velocity, across frictionless ice. 	Force Diagram:
3. Draw a force diagram for a baseball player who slows as he slides into the base. 	Force Diagram:

4. Draw a force diagram for the chandelier which is suspended from the ceiling by a chain. 	Force Diagram:
5. Draw a force diagram for the bucket of water that is being raised from the well at a constant velocity. 	Force Diagram:
6. Draw a force diagram for a skydiver who has just left the plane and is accelerating toward the ground. 	Force Diagram:
7. Draw a force diagram for a skydiver who is descending at a constant velocity. 	Force Diagram: