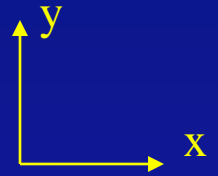


# Apparent Weight



- Recall:  $\Sigma F = m a$

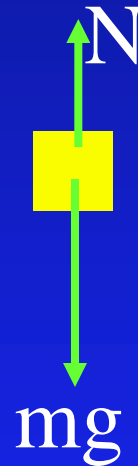
- Consider person accelerating up in an elevator.

- Draw FBD

- Apply NSL

- »  $N - mg = ma$

- »  $N = m(g+a)$



- **Apparent weight** is *normal force* from scale or floor.

- Note: in free fall  $a_y = -g$  so  $N=0$

