

# NEWTON'S 2ND LAW

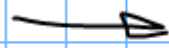
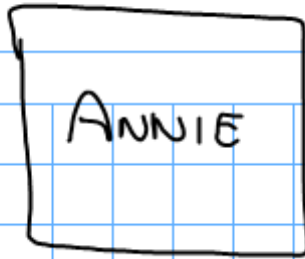
$$\frac{F_{\text{NET}}}{m} = \frac{m}{m} \times a$$

$$F_{\text{NET}} \div m = a$$

NEWTONS      kg      m/s<sup>2</sup>    m/s/s

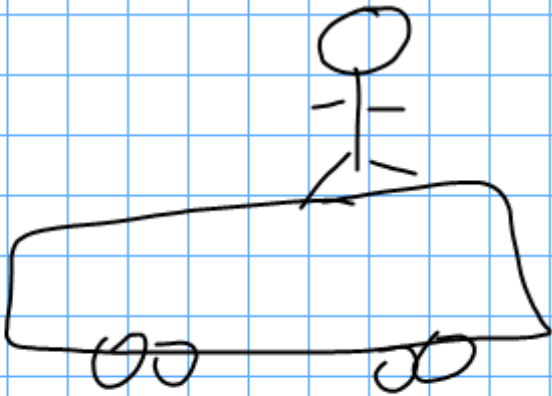
# STUDY GUIDE #1 ANSWERS

1)



ANNIE CONTINUES TO  
MOVE AT 7 km/s BECAUSE  
THERE IS NO UNBALANCED  
FORCE.

→ 7 km/sec



2) ATST HAN'S NOSE PUSHES  
ON THE CATTLE PROD

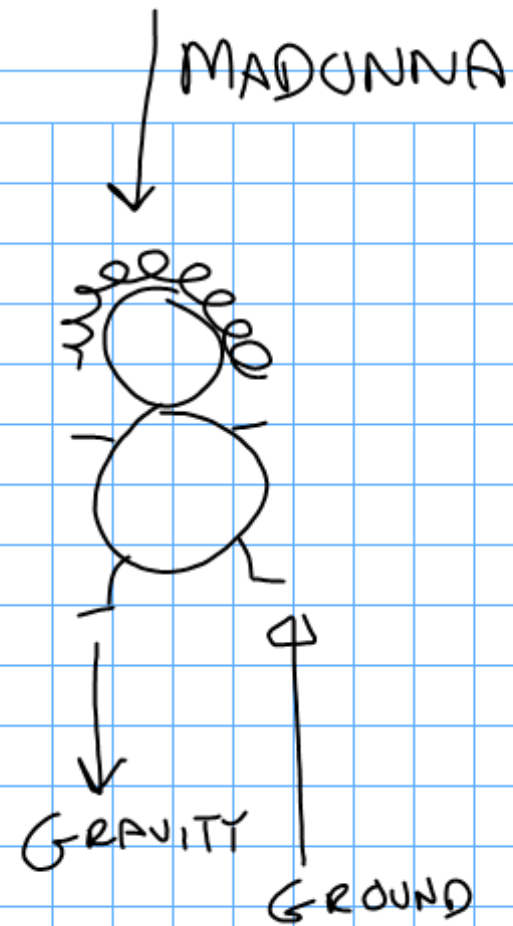
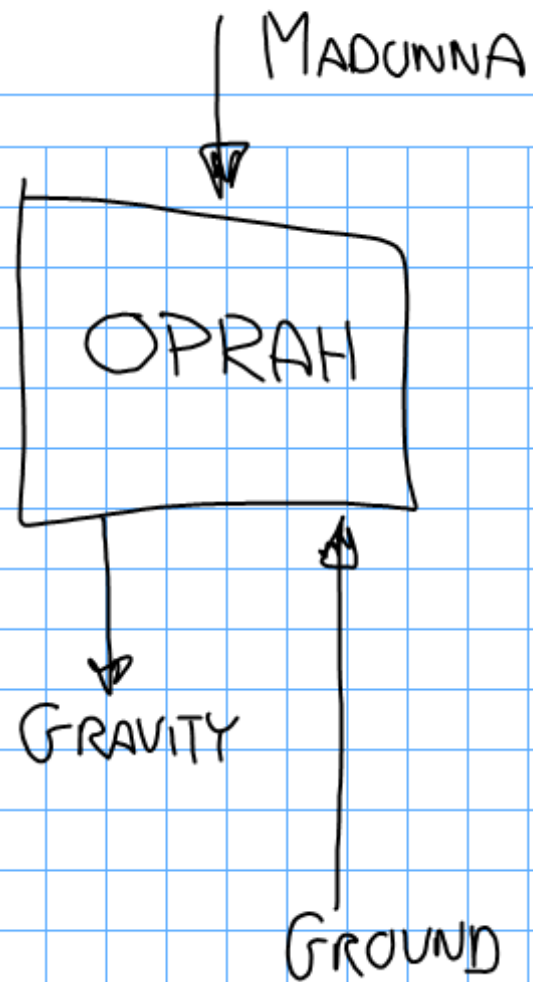
3RD LAW

3)



BUNNY CONTINUES TO  
MOVE UPWARD BECAUSE  
FORCES ARE BALANCED.

4)



5)

1a)

$$7.6 \text{ m/s}^2 = a \quad 58 \text{ kg} = m$$

1b)

$$F_{\text{NET}} = ?$$

2)

$$F_{\text{NET}} = m \times a$$

3)

$$F_{\text{NET}} = 58 \times 7.6$$

4)

$$F_{\text{NET}} =$$

440.8

N

IN THE DIRECTION  
OF HIS ACCELERATION

5)

$$F_{\text{NET}} = m \times a$$

$$\frac{440.8}{58} = \frac{58}{58} \times a$$

$$7.6 \frac{\text{m}}{\text{s}^2} = a \quad \checkmark$$