Name: _____ **Date:** _____

Strawkets and Weight Activity – Weight Quiz

Weight

1. My rocket is too heavy for the thrust from my engines. What are two things I could do to have a successful liftoff?

    1. _____
    2. _____

2. F = ma is from Newton's _____ (first, second or third) law of motion?

    (Force = mass × acceleration)

3. Which of these rockets will make it to orbit? (Force ÷ Mass = Acceleration)

    An ACCELERATION of 10 or greater is needed to achieve orbit!

#1 

Fuel thrust force = 40
Rocket mass (weight) = 5

_____ ÷ _____ = _____

#2 

Fuel thrust force = 60
Rocket mass (weight) = 6

_____ ÷ _____ = _____

#3 

Fuel thrust force = 70
Rocket mass (weight) = 7

_____ ÷ _____ = _____

#4 

Fuel thrust force = 75
Rocket mass (weight) = 8

_____ ÷ _____ = _____

Image source: quest.nasa.gov/neuron/kids/ express/page2.html