

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 $\times$ acceleration)

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

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



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

_____ $\div$ _____ = _____



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

_____ $\div$ _____ = _____



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

_____ $\div$ _____ = _____



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

_____ $\div$ _____ = _____

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