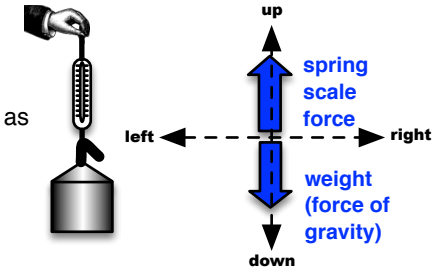
Weight Invesigation

PART 1



1. When will the spring scale force be the same as the weight? (Check all that apply!)
   - ☐ When the weight is at rest.
   - ☐ When the weight is speeding up.
   - ☐ When the weight is slowing down.
   - ☐ When the weight maintains speed.

2. Use your spring scale and the 1 and 0.5 kilogram to fill in the first two lines of the table.

Then use reasoning to figure out what the other amounts of kilograms would weigh.

mass	weight
1 kg	
0.5 kg	
2 kg	
10 kg	
200 kg	

Measure

Calculate

3.What is Earth's gravitational field strength? (Newtons/kg) How many Newtons of Force do you get downward for each kg of mass?

PART 2

4. Use reasoning to reverse the process now and figure out the mass in kilograms.

mass	weight
	40 N
	2 N
	3,000 N

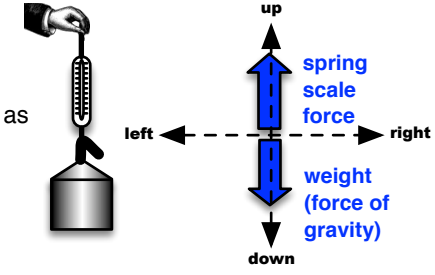
5. Use the spring scale to measure the weight of the wood block in Newtons.

Use reasoning to reverse the process now and figure out its mass in kilograms.

mass	weight

Weight Investigation

PART 1



1. When will the spring scale force be the same as the weight? (Check all that apply!)
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   - ☐ When the weight maintains speed.

2. Use your spring scale and the 1 and 0.5 kilogram to fill in the first two lines of the table.

Then use reasoning to figure out what the other amounts of kilograms would weigh.

mass	weight
1 kg	
0.5 kg	
20 kg	
0.3 kg	
100 kg	

Measure

Calculate

3.What is Earth's gravitational field strength? (Newtons/kg) How many Newtons of Force do you get downward for each kg of mass?

PART 2

4. Use reasoning to reverse the process now and figure out the mass in kilograms.

mass	weight
	50 N
	3 N
	1,000 N

5. Use the spring scale to measure the weight of the wood block in Newtons.

Use reasoning to reverse the process now and figure out its mass in kilograms.

mass	weight