Science 8 Force of gravity Name:\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the name of the scientist that discovered gravity?
2. Draw an arrow to show the direction of the force of gravity on the box below
3. Calculate the force of gravity on the following masses
4. 1kg:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. 20kg:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. 58kg:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. 125kg:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Calculate the force of gravity on the following masses

15 kg :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

0.58kg:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

0.02kg:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

482g:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

16g:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Jenny picks up an apple that has a mass of 220g. What is the force of gravity on the apple?
2. A small boat with a mass of 1500kg floats in a lake.
   1. What is the force of gravity on the boat?
   2. Which way does the force of gravity act?
   3. Are there other forces on the boat other than the force of gravity? Explain
3. You stand on a bathroom scale and it reads 50kg. Will the reading on the bathroom scale change if you are on the moon?
4. Tommy measures the mass of his eraser on earth using a triple beam balance and it reads 200g. He then does the same experiment on the moon. Will the reading change? Explain