**Forces Revision Sheet**

**Vocabulary**

1. **Forces** = a push or a pull that acts on an object.
2. **Newton** = the unit for force (N)
3. **Non-contact force** = a force that acts on an object without touching it
4. **Upthrust** = a force acting in the upwards direction
5. **Magnetism** = a type of non-contact force acting on magnets or magnetic objects
6. **Gravity** = a non-contact force between all objects with mass, since the Earth has a large mass there is a large force of gravity attracting objects towards the Earth
7. **Friction** = force acting against a moving object when two objects rub against each other, in the opposite direction to the motion
8. **Static electricity** = a non-contact force caused by electricity
9. **Drag** = a force that acts against a moving object and slows it down, in the opposite direction to motion
10. **Balanced forces** = forces that are equal in size but opposite in direction
11. **Force diagram** = a diagram with arrows representing the size and direction of forces acting on an object
12. **Mass** = amount of substance, measured in grams or kilograms
13. **Weight** = force measuring the heaviness of something, affecting by gravity, measured in Newtons
14. **Lubricant** = a material that is used to decrease the amount of friction between two surfaces
15. **Speed =** how fast something is traveling (distance travelled per unit of time)
16. **Density** = how heavy something is for its size (mass per unit of volume) in g/cm3.
17. **Mass =** how much matter is in an object, measured with a balance in grams (g).
18. **Volume =** how much space an object takes up, measured in cm3.

**Science Concepts**

I can…

1. Describe what a force is and recall examples of forces.
2. Explain the difference between a contact and a non-contact force.
3. Identify situations with and explain the difference balanced and unbalanced forces.
4. Draw force diagrams to represent different situations and draw combined forces.
5. Explain the difference between mass and weight
6. Calculate weight with the equation w = m x g
7. Describe what the force of friction is.
8. Explain when it is useful to have high or low friction.
9. Analyse when it is useful to use lubricants.
10. Draw force diagrams to show friction forces.
11. Calculate speed using the equation speed = distance / time.
12. Analyse distance/time graphs.
13. Draw a line graph.
14. Calculate density using the equation density = mass / volume.
15. Predict if something will sink or float using ideas about density.