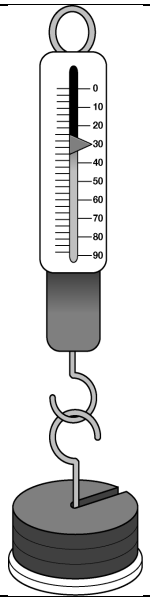
Name: Class:

K3P2 - Force (part 1)	
Force – 'any interaction that changes the speed, direction or sharp of an object'	
Lesson 1: Introduction to forces	
Key words:	Force, Newton, contact force, gravity, interaction pair
1) Name this piece of equipment and describe a simple experiment using it.	
2) Describe force.	
3) Name 3 forces	
4) What is the unit of force?	
5) Complete the sentences,	**1** Copy and complete the sentences below. A force is a _____ or a _____. We can show the forces acting on an object using force _____. Forces come in pairs, called _____ pairs. To measure forces you use a _____.

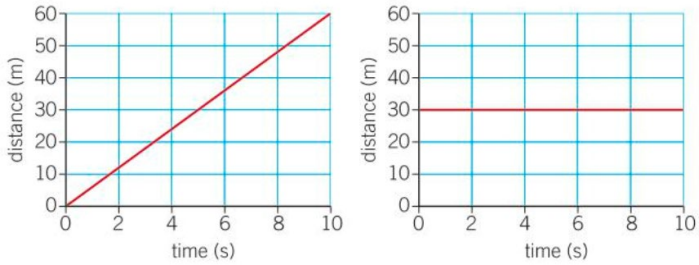
Name: Class:

Lesson 2: Balanced and unbalanced	
Keywords:	Balanced, equilibrium, resultant force, driving force
1) Define balanced forces (equilibrium)	
2) If a resultant force is acting, explain why you are accelerating.	
3)	**1** Copy and complete the sentences below. If the forces on an object are the same_____ but act in _____ directions they are balanced. The object is in _____. The forces acting on any stationary object are _____. If the resultant force on an object is not zero we say the forces are _____, and the speed or _____ of motion will change, or both will change.
4) In terms of forces, explain what happens when an object at high speed suddenly slows down due to friction.	

Lesson 3: Speed	
Key words:	Speed, meters per second, average speed, relative motion
1) What is the formula for speed?	
2) What is the unit of speed?	
3) Calculate speed, if you travel 50m in 8s.	

Name: Class:

4) Explain the difference between speed and average speed.	
5) State what is meant by relative motion.	

Lesson 4: Distance-time graphs	
Key words:	Distance -time graph, acceleration
1) Work out the speed plotted in these distance time graph.	
2) What does the slope in a distance time graph represent?	
3) What does acceleration mean?	
4) What does a flat line of a distance-time graph represent?	
5) Plot a distance time graph for someone walking, standing still then running.	

Lesson 5: Gravity	
Key words:	Gravitational force, weight, mass, gravitational field strength
1) Explain the difference between weight and mass.	

Name: Class:

2) What is the equation relating weight and mass?	
3) What is the gravitational field strength on earth?	
4) Explain what is meant by a field in 'physics'.	
5) Calculate the weight of a person with a mass of 80kg in the gravitational field of Jupiter where g=27 N/kg	
6) Complete the sentences.	**1** Copy and complete the sentences below. Some forces act a distance. The force of gravity acts on things that have _____. Your weight is a _____ and is measured in _____. Your _____ is the amount of stuff you are made up of and is measured in _____.
Choose 5 key words from the whole topic and put them into sentences.	1) 2) 3) 4) 5)