

THE BERWICKSHIRE HIGH SCHOOL SCIENCE FACULTY
S2 PHYSICS - Transport and Forces Practice TEST

NAME: _____

Total marks	Percentage (%)
/ 33	

1. Complete the table below

4

Quantity	Equation Symbol	Unit	Unit Symbol
distance	d	meters	m
Speed			
		Seconds	
			Kg
Weight			

2. What device is used to measure the following quantities?

- a) Distance 2
- b) Time 2
- c) Force 1
- d) Mass 1
- e) Weight 1

3. a) Draw a free body diagram for a car that has 500N of driving force and 400N of frictional force. 1
- b) Calculate the resultant force on the car 1
- c) Is the resultant force balanced or unbalanced? 1
- d) Will the speed increase, decrease or stay the same? 1
4. a) Draw a labelled diagram of an experiment to calculate the average speed of an object. 2
- b) What measurements and calculations must be made to calculate the speed in the experiment above 3

- 5 State the word equation for the friction energy change 1
- 6 State 2 ways to reduce friction 1
- 7 State 2 ways friction can be useful 1
- 8 What are the 3 things a force can change? 1
- 9 A force is a _____ or a _____. 1

10 Bob has a mass of 50kg. Calculate Bobs weight on:

a) Earth 2

b) Jupiter 2

11 Sketch the magnetic field around 2 bar magnets with the south poles facing each other. 1

12 a) Describe how to make an electromagnet 2

b) What is a benefit of an electromagnet? 1