

# Physics 4

## Journey Into Space

### Homework

Name - \_\_\_\_\_.

Class - \_\_\_\_\_.

Teacher - \_\_\_\_\_.

Homework 1 Score : /15

Homework 2 Score : /15

## Journey Into Space - Homework Exercise 1

1. Calculate the weight of each of the following on Earth:
- (a) A girl whose mass is 50kg (2)
  
  - (b) A dog of mass 20kg (2)
  
  - (c) A 9 kg box (2)
  
  - (d) A ball of mass 0.5 kg (2)
2. Calculate the mass of each of the following weighed on Earth:
- (a) A man who weighs 750N (2)
  
  - (b) A tin of peas which weighs 4.5N (2)
  
  - (c) A chair which weighs 350N (2)
  
  - (d) A rabbit which weighs 40N (1)

**Total = 15**

## Journey Into Space Homework Exercise 2

1. Using the word bank complete the following sentences about why rockets move.  
(Word Bank ; action, up, pushes, reaction)

Rockets move \_\_\_\_\_ because the rocket motor \_\_\_\_\_ out  
the exhaust gases ( \_\_\_\_\_ ) and the exhaust gases move the rocket in the  
other direction ( \_\_\_\_\_ ). (4)

2 (a) Name the 8 planets in our solar system (4)

(b) Which planet is closest to the sun (1)

(c) Which planet takes 24 hours to orbit the sun (1)

3. Describe what happens to a spacecraft as it enters the earth's atmosphere. (2)

4. What are the three main requirements for life on a planet. (3)

**Total = 15**