

**The Primary Stage of Grades (4-5)**  
**School Year 2022- 2023**

Name: \_\_\_\_\_

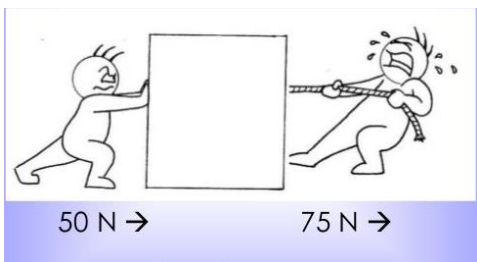
**Subject: Science**  
**Unit 7: Effects of Forces**  
**Worksheet 3: Balanced and unbalanced forces**  
**Class: Grade 5 CP (All sections)**

Date: / /

**Objective/s:**

- Identify balanced and unbalanced forces acting on different objects, and calculate the resultant force.

**Q1: Find the resultant force in each of the following situations:**



Resultant Force = .....



Resultant Force = .....



Resultant Force = .....



Resultant Force = .....



Resultant Force = .....

.....



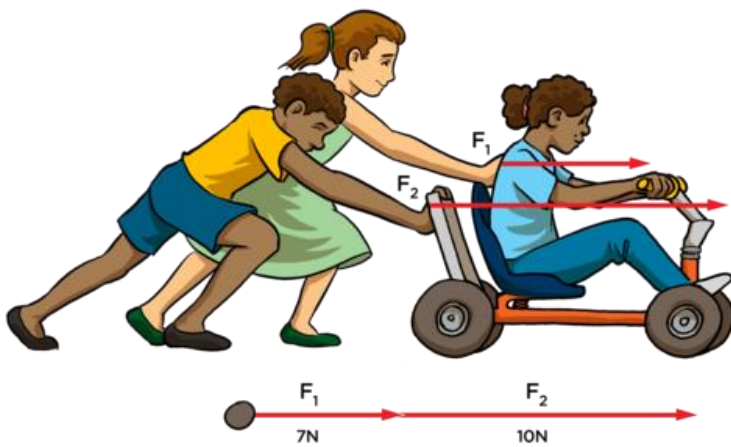
Resultant Force= .....



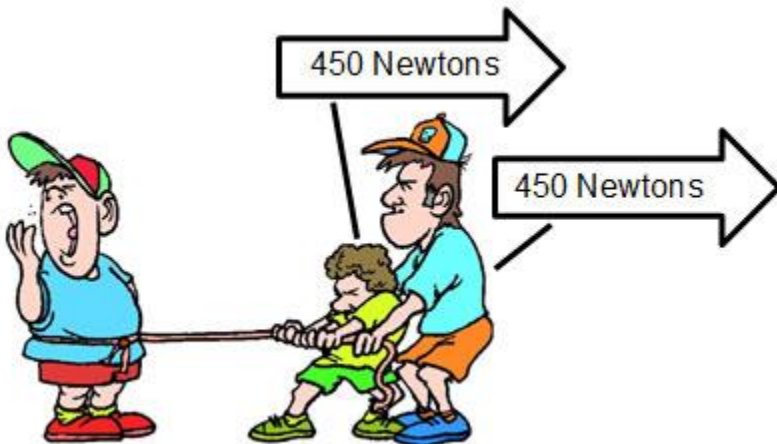
Resultant Force= .....



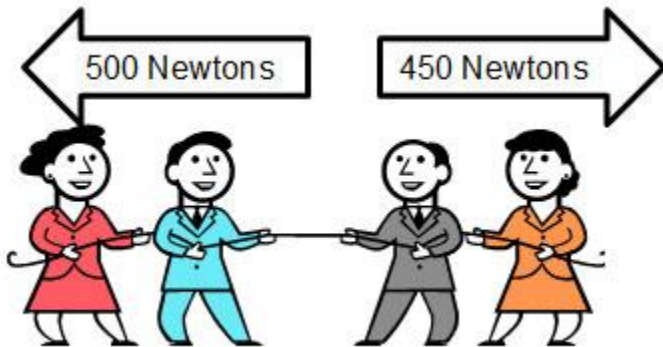
Resultant Force = .....



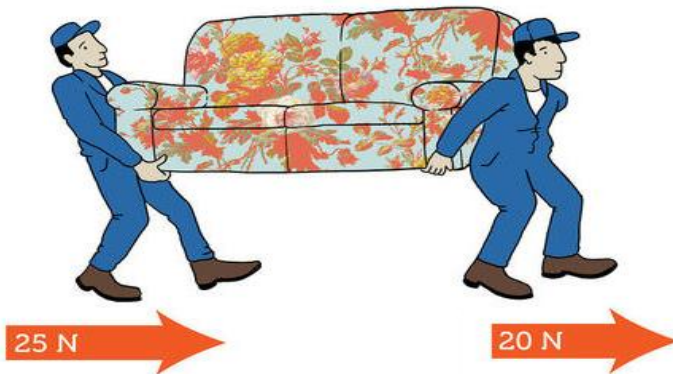
Resultant Force =



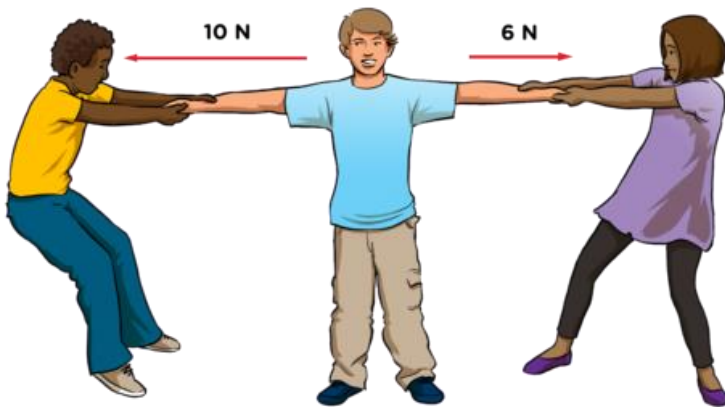
Resultant Force =



Resultant Force =



Resultant Force =

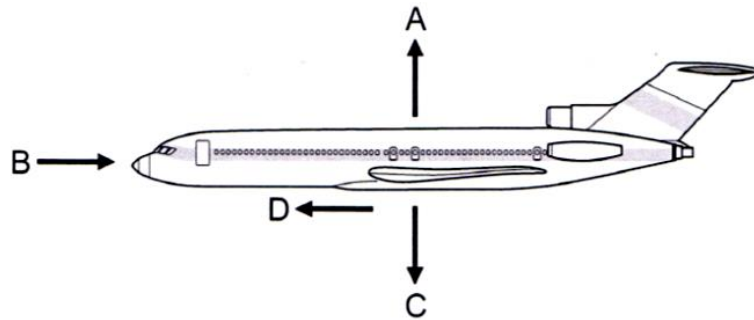


Resultant Force =

**Balanced forces do not cause a change in the object's motion.** When balanced forces act on a moving object, the object will continue moving at the same speed in the same direction.

**Unbalanced forces change the motion of an object,** they may cause the object to speed up, slow down or change direction.

Q2: The picture shows an aeroplane flying.



(a) Draw a line to connect each letter to the correct force.

letter	force
A	air resistance
B	moving aeroplane upwards
C	moving aeroplane forwards
D	gravity

(b) The force moving the aeroplane forward is increased more than the air resistance.

What happens to the aeroplane?

Tick (✓) **one** box.

moves up in the air	<input type="checkbox"/>
moves down in the air	<input type="checkbox"/>
speeds up	<input type="checkbox"/>
slows down	<input type="checkbox"/>
stops moving	<input type="checkbox"/>

(c) Write down **one** way air resistance can be reduced.

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