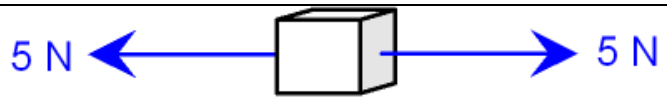
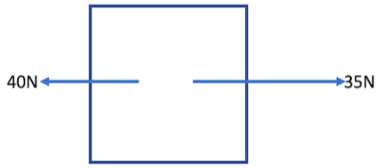
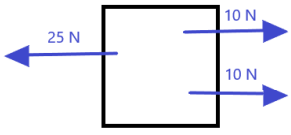
OBHS Core Questions:
Subject: Science
Year and Term: Year 8 Autumn Term
Topic: 8P1 Forces and Pressure

Learn these questions to build a strong foundation of knowledge for this half-term. Ask family or friends to test you regularly, or practise on your own using the 'Look, Say, Cover, Write' method.

Core Question	Answer
1. Name 3 forces	Thrust, air resistance, friction, weight, normal contact force.
2. State the unit for force	Newton, N
3. What is the unit for air resistance?	Newtons, N
4. What is a non-contact force?	A force acting between two objects that are not touching each other.
5. Name 2 non-contact forces	Magnetic force, electrostatic force, weight (or gravitational force)
6. How are forces represented in diagrams?	As arrows
7. What two things do the arrows on a force diagram demonstrate?	Size (or magnitude) of the force Direction in which the force acts
8. What is the motion of an object if all forces are balanced?	Constant speed in a straight line or stationary
9. What is the motion of an object if the forces are unbalanced?	Accelerating
10. What is equilibrium?	When the forces acting on an object are equal
11.  Calculate the resultant force acting on this object.	0N
12.  Calculate the resultant force acting on this object.	5N
13.  Calculate the resultant force acting on this object.	5N
14. What happens to pressure in a fluid as depth increases?	It increases because there is more fluid above.

15. What happens to pressure in a fluid as you travel up higher into the air.	It decreases.
16. What is upthrust?	An upward force from a fluid that helps things float.
17. Why does an object sink or float in a fluid?	It depends on whether its weight is more or less than the upthrust.
18. What is the formula for calculating the amount of pressure acting on an object.	Pressure = force ÷ area.
19. What is stretching?	Pulling something to make it longer.
20. What is compression?	Pushing or squashing something to make it smaller.
21. What happens when you stretch a spring?	It gets longer if you pull it with a force.
22. What is Hooke's Law?	The extension of a spring is directly proportional to the force applied, up to a limit.
23. What is the spring constant?	A number that shows how stiff a spring is.
24. What happens if you stretch a spring too much?	It can go past its limit and not return to its original shape.
25. How do you calculate the extension of a spring?	Final length - starting length