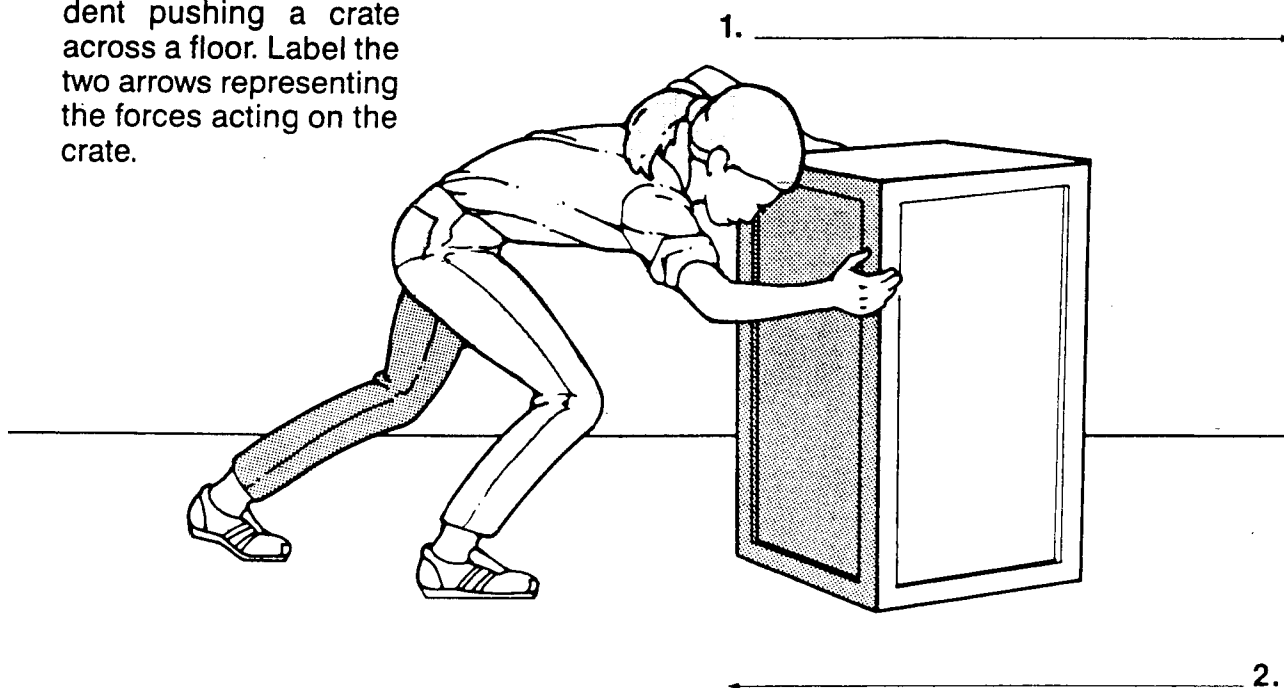


## BALANCED AND UNBALANCED FORCES

- A. The sketch shows a student pushing a crate across a floor. Label the two arrows representing the forces acting on the crate.



- B. Each of the following statements describes what happens as the student applies a force on the crate. For each statement write either **BALANCED** or **UNBALANCED** in the space at the right to describe the forces acting on the crate at that point.

3. The student, at first, is unable to budge the crate from a resting position. 3. \_\_\_\_\_

4. As the student pushes harder the crate finally begins to move. 4. \_\_\_\_\_

5. The student keeps pushing the crate with increasing force and the crate moves faster and faster. 5. \_\_\_\_\_

6. Finally the student uses just enough force to keep the crate moving at a steady pace. 6. \_\_\_\_\_

- C. Complete the following sentences:

7. When unbalanced forces act on an object that is moving, there is a change in \_\_\_\_\_ or/and \_\_\_\_\_.

8. When unbalanced forces act on an object that is at rest, the object \_\_\_\_\_.