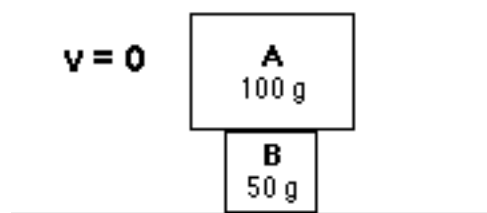


## Free Particle Model Worksheet 2: Interactions

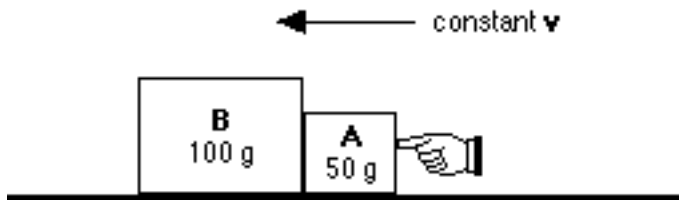
1. Explain what a normal force is and give an example.
2. Can an inanimate object (such as a table) exert a force? Can the magnitude of the force exerted by an inanimate object change? Explain and give an example.
3. If the acceleration of an object is zero, are no forces acting on it? Explain.
4. How does the force block A exerts on block B compare to the force block B exerts on block A?

Draw and label a quantitative force diagram for each block, using equality marks on the vectors.



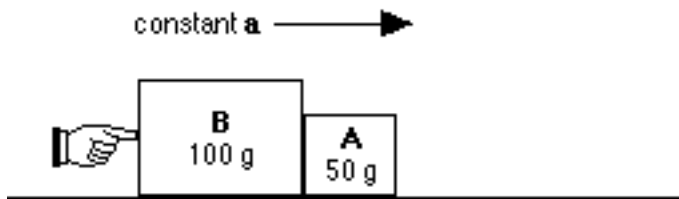
5. How does the force block A exerts on block B compare to the force block B exerts on block A?

Draw and label a force diagram for each block, using equality marks on the vectors.



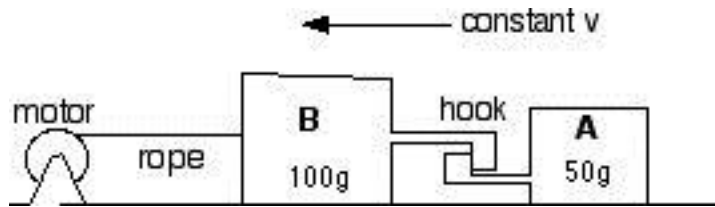
6. How does the force block A exerts on block B compare to the force block B exerts on block A?

Draw and label a force diagram for each block, using equality marks on the vectors.



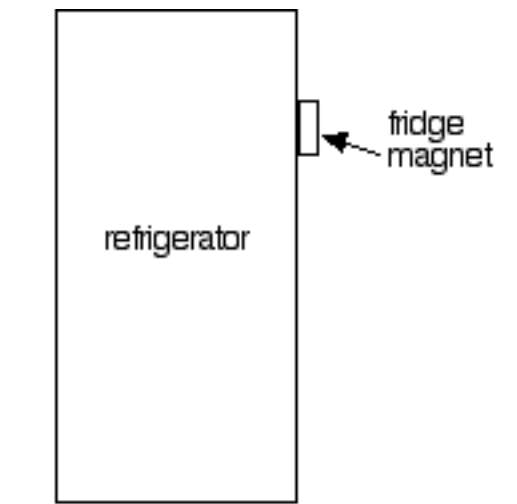
7. How does the force block A exerts on block B compare to the force block B exerts on block A?

Draw and label a force diagram for each block, using equality marks on the vectors.



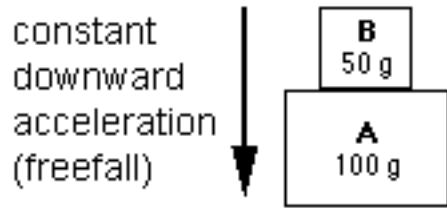
8. How does the force the magnet exerts on the refrigerator compare to the force the refrigerator exerts on the magnet?

Draw and label a force diagram for the magnet and the refrigerator, using equality marks on the vectors.



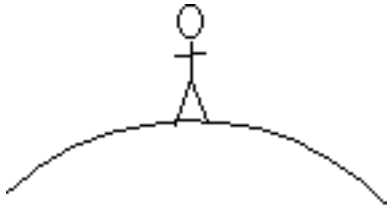
9. How does the force block A exerts on block B compare to the force block B exerts on block A?

Draw and label a force diagram for each block, using equality marks on the vectors.



10. How does the force the earth exerts on the person compare to the force the person exerts on the earth?

Draw and label force diagrams for the earth and the person, using equality marks on the vectors.



11. How does the force the earth exerts on the moon compare to the force the moon exerts on the earth?

Draw and label force diagrams for the earth and the moon, using equality marks on the vectors.

