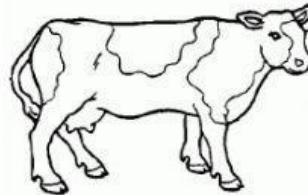


## Motion & Forces Practice QUIZ

1. Motion as defined in science is:



2. Examine the picture to the right. What object could be used as a reference point to determine if the cow is in motion?



3. You are riding on a bus and the person on the street outside appears to be moving away from you. To the person on the street, you and the bus are moving away from them. What is changing in the example?

4. If a car is moving what would be used as reference points?

5. You are standing on one side of the road and your friend is standing on the other side of the road. To you, the car is moving from the left to the right. To your friend on the other side, it is going from right to left. This is an example of

6. When an object **changes position** relative to a reference point, the object is:

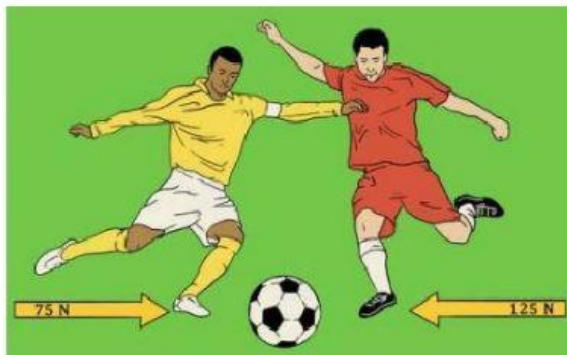
7. For the children on the bus, if they use other children riding the bus as their frame of reference, they

8. Forces cause all motions. Every time the motion of an object changes, it's because a force has been applied.

9. Unbalanced forces cause an object to:

10. The net force is equal to zero when the forces are\_\_\_\_\_.

*The boys in the Figure below are about to kick the soccer ball in opposite directions.*



11. What will be the net force on the ball? \_\_\_\_\_ N
12. In which direction will the ball move? \_\_\_\_\_ N
13. What kind of force occurs when two objects touch one another?
14. What causes an object to change its' position?
15. Total of all forces acting on an object?
16. When an object moves at a constant speed or is at rest the forces are....