

Speed Movie Questions

SPS8. Students will determine relationships among force, mass, and motion.

- a. Calculate velocity and acceleration.
- b. Apply Newton's three laws to everyday situations by explaining the following:
 - Inertia
 - Relationship between force, mass and acceleration
 - Equal and opposite forces
- c. Relate falling objects to gravitational force
- d. Explain the difference in mass and weight.
- e. Calculate amounts of work and mechanical advantage using simple machines

- Equation for velocity = _____

- Equation for acceleration = _____

- Newton's 1st law = _____

- Newton's 2nd law = _____

- Newton's 3rd law = _____

1. What is the name and profession of the main character in the movie? _____

2. What was his mission at the beginning of the movie? _____

3. What was the bomber's mission at the beginning of the movie? _____

4. What did Jack do to get Harry released from the bomber? _____

5. How will the bomb on the bus get activated? What will make the bomb blow up? _____

6. What would the bomber do if people were unloaded from the bus? _____

7. What happens after Jack explains the situation to the bus driver, 'Sam'? _____

8. Harry finds out the bomber is a _____

9. What happens when they try to let a passenger off the bus? _____

10. What does Annie have to do to get over the freeway? _____

11. What happens when Harry and the SWAT team go to the bombers house? _____

12. What happens when Jack tries to defuse the bomb? Why is this a big problem? _____

13. What important device does Jack find? _____
14. How does Jack use this to his advantage? _____
- _____
15. How do Jack and Annie escape the bus? _____
- _____
16. How does Newton's laws apply to the bus? _____
- _____
17. What does Howard do when he finds out he has been tricked? _____
- _____
18. How is Howard killed? _____
19. How does Jack save Annie? _____
20. What is the relationship between force, mass, and motion in this movie?