

Directed Reading A

Section: Friction: A Force that Opposes Motion

1. What unbalanced force causes a ball to stop rolling?

2. The force that opposes motion between two surfaces that are in contact is

THE SOURCE OF FRICTION

3. What are two factors that affect the amount of friction between two surfaces?

4. What happens to friction if the force pushing surfaces together increases?

5. Why is more force needed to slide a large book across a table than to slide a small book across the same table?

6. Is the amount of friction greater between rough surfaces or smooth surfaces? Why?

TYPES OF FRICTION

7. What is kinetic friction?

Directed Reading A *continued*

8. What are two types of kinetic friction?

9. Which type of kinetic friction is usually greater, sliding kinetic friction or rolling kinetic friction?

10. What is one example of the use of sliding kinetic friction?

11. What is one example of the use of rolling kinetic friction?

12. What is static friction?

13. As soon as an object starts moving, what replaces static friction?

FRICITION: HARMFUL AND HELPFUL

14. What is one helpful way friction affects a car?

15. What is one harmful way friction affects a car?

Directed Reading A *continued*

16. What is a substance applied to a surface to reduce friction called?

17. What are three ways friction can be reduced?

18. What are two ways friction can be increased?
