

HOT DOTS®

Force, Motion and Simple Machines Science Cards

Guide

Hot Dots® Science Cards provide a comprehensive review of science content for grades 3-5. Use the cards with the Hot Dots® pen (sold separately) for self-checking review, or use the cards by themselves as science flash cards.

What's on Each Card?

Question Number

2

Force, Motion, and Simple Machines

MOVING OBJECTS

Topic

Question

A large truck and a small car are hurtling down the road at the same speed. There is a red light up ahead. Which of the following statements is most accurate?

Illustration/Photo



Hot Dots®

Answer Choices

- A. The truck needs more time to stop because it's heavier and has more inertia.
- B. The car needs more time to stop because it is lighter and has more inertia.
- C. The car and truck can both stop immediately.
- D. The truck cannot stop.

Wow! That's EXCELLENT!

Using the Cards with the Hot Dots® pen

The Hot Dots® pen adds instant, self-checking feedback to independent practice in a fun, interactive way. When the cards are used with the Hot Dots® pen, students receive electronic answer reinforcement in two ways:

- Touch the pen to a **CORRECT** answer dot on the card and students are instantly rewarded with a glowing green light, a cool phrase, and a variety of motivating sounds.
- Touch the pen to an **INCORRECT** answer dot on the card and the pen glows red and gently provides encouraging words and sound effects.

Before letting students work independently, demonstrate how to use the cards and the Hot Dots® pen. Choose a sample card, read the question together, and select the correct answer choice. Show students how to position the pen on the center of the Hot Dot next to the answer choice, making sure the tip of the pen is flat on the surface of the dot. Demonstrate what happens when an incorrect Hot Dot answer choice is selected.



EI-2370 Hot Dots® pen sold separately.

Tips:

- Make sure that the cards rest on a hard surface when using the Hot Dots® pen on them.
- Never laminate the cards.

Suggestions for the Teacher

This set contains 36 two-sided cards with 72 questions in all. The set is divided into several topics.

Students can independently read the question and answer it with the Hot Dots® pen or with pencil and paper. The cards may be duplicated and given as a group or class activity. You may also wish to project a card for the whole class to see so you can discuss the answer together.

The Table of Contents enables you to select specific cards to target content where students need reinforcement. Students can also complete an entire set for a more comprehensive review of a broader topic. Because the Hot Dots® pen provides instant feedback in an engaging way, this makes a great activity for a learning center as well as for individual practice.

Force, Motion, and Simple Machines Table of Contents

Moving Objects

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- 5-6 Work
- 7 Lubricants
- 8-10 Measurement
- 11 Gears
- 12-14 Acceleration and Velocity

Forces

- 15-18 Work, Force, and Effort
- 19-21 Friction
- 22-23 Buoyancy
- 24-28 Using Force to Move Objects
- 29-34 Gravity, Inertia, and Newton's First Law of Motion

Simple Machines

- 35 Definition
- 36-41 Levers
- 42-46 Pulleys
- 47-50 Wheels and Axles
- 51-54 Inclined Planes
- 55-57 Wedges
- 58-60 Screws
- 61 Complex Machines

Magnetism

- 62-63 Iron
- 64 Electromagnets
- 65 Natural Magnets
- 66-67 Compasses and Earth's Magnetic Field
- 68-72 Magnetic Forces

Answer Key

1 D	10 A	19 B	28 A	37 C	46 D	55 B	64 D
2 A	11 A	20 D	29 A	38 A	47 D	56 D	65 A
3 D	12 B	21 B	30 B	39 D	48 C	57 A	66 C
4 D	13 C	22 C	31 A	40 B	49 C	58 A	67 C
5 B	14 A	23 C	32 A	41 C	50 B	59 B	68 C
6 B	15 D	24 C	33 C	42 D	51 B	60 D	69 B
7 B	16 D	25 C	34 C	43 C	52 D	61 A	70 C
8 A	17 B	26 A	35 D	44 A	53 D	62 C	71 D
9 A	18 B	27 B	36 A	45 B	54 C	63 B	72 C

