

Form	BA - 1, Science, Grade 3, SY 24-25
Identifier	F-7ZWBC5_C08859

Item	BA-1_Grade 3_01
Identifier	I-SCI-F-S000026_C86080
Standards	SCI.3.3-PS2-1

Effects of Different Materials on the Distance a Toy Car Travels

Material	Distance Traveled (in cm)
Grass	20
Carpet	30
Wooden Surface	45
Sidewalk	60
Smooth Tile	70

Which surface allows the toy car to travel the farthest distance?

- A Wooden surface
- B Carpet
- C Smooth Tile
- D Grass

Item	BA-1_Grade 3_02
Identifier	I-SCI-F-S000026_C67417
Standards	SCI.3.3-PS2-1

Effects of Different Materials on the Distance a Toy Car Travels

Material	Distance Traveled (in cm)
Grass	20
Carpet	30
Wooden Surface	45
Sidewalk	60
Smooth Tile	70

Which surface causes the toy car to travel the shortest distance?

- A Wooden surface
- B Carpet
- C Smooth Tile
- D Grass

Item	BA-1_Grade 3_03
Identifier	I-SCI-F-S000026_C94097
Standards	SCI.3.3-PS2-1

Effects of Different Materials on the Distance a Toy Car Travels

Material	Distance Traveled (in cm)
Grass	20
Carpet	30
Wooden Surface	45
Sidewalk	60
Smooth Tile	70

If you want the toy car to travel a medium distance, which surface should you choose?

- A Wooden surface
- B Carpet
- C Smooth Tile
- D Sidewalk

Item	BA-1_Grade 3_04
Identifier	I-SCI-F-S000026_C17522
Standards	SCI.3.3-PS2-2

Magnets Attracting and Repelling

Magnetic objects can either attract or repel each other. When two magnets are brought close together, they can either pull towards each other or push away from each other, depending on their poles.

For example, when the north pole of one magnet is brought near the south pole of another magnet, they will attract and stick together. On the other hand, if the north pole of one magnet is brought close to the north pole of another, they will push away or repel each other.

Shantel puts a very strong magnet on the top of two very light weight toy cars as shown below and then placed the toy cars very close to each other. Predict what will happen when she lets go of the cars and why it happens.



- A They will repel each other
- B They will attract each other
- C They will not affect each other
- D They will both lose their magnetic properties

Item	BA-1_Grade 3_05
Identifier	I-SCI-F-S000026_C82686
Standards	SCI.3.3-PS2-2

Magnets Attracting and Repelling

What will you observe if the north pole of one magnet is brought close to the north pole of another magnet?

- A They will attract each other
- B They will stick together
- C They will repel each other
- D They will not move

Item	BA-1_Grade 3_06
Identifier	I-SCI-F-S000026_C63218
Standards	SCI.3.3-PS2-2

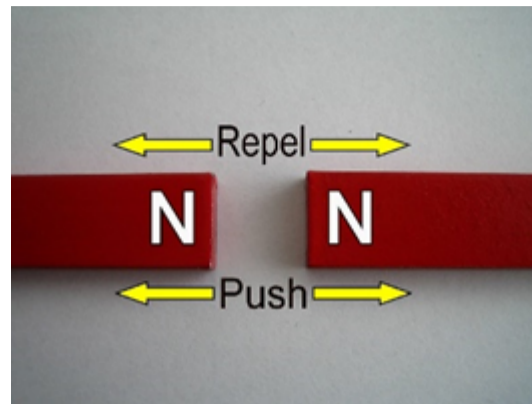
Magnets Attracting and Repelling

Which of the following statements is true about magnets?

- A Magnets can only attract each other
- B Magnets can only repel each other
- C Magnets do not affect each other
- D Magnets can either attract or repel each other

Item	BA-1_Grade 3_07
Identifier	I-SCI-F-S000026_C44531
Standards	SCI.3.3-PS2-3

A student observes that two magnets repel each other more strongly when their like poles face each other and are closer together.



Which cause-and-effect relationship is the student identifying?

- A The force of repelling gets larger as the magnets get closer together.
- B The force of repelling gets larger as the strength of the magnets gets less.
- C The force of repelling gets smaller as the number of poles on each magnet increases.
- D The force of repelling goes down as the magnets are moved closer together.

Item	BA-1_Grade 3_08
Identifier	I-SCI-F-S000026_C94095
Standards	SCI.3.3-PS2-3

A latex balloon is rubbed with a wool cloth causing the balloon to become electrically charged (static electricity). When the balloon is placed close to paper cutouts that look like little people the paper people appear to “jump” onto the balloon.



If the distance between the balloon and the paper people is increased, what will be the most likely effect on the electric force between them?

- A The electric force will increase because the objects are farther apart.
- B The electric force will decrease because the distance between the objects is greater.
- C The electric force will remain unchanged regardless of the distance.
- D The electric force will first increase, then decrease as the distance increases.

Item	BA-1_Grade 3_09
Identifier	I-SCI-F-S000026_C13245
Standards	SCI.3.3-PS2-3

A student brings a charged rod close to small pieces of paper, and the paper is attracted to the rod.



What can the student infer about the cause of this attraction?

- A The rod and the paper are both have the same charge.
- B The rod passes a charge in the paper, causing an attraction between like charges.
- C The rod is positively charged, and the paper is negatively charged.
- D The paper becomes magnetized by the rod, creating a magnetic force.

Item	BA-1_Grade 3_10
Identifier	I-SCI-F-S000026_C43950
Standards	SCI.3.3-PS2-4

A student is designing a toy that makes a figure float using magnets.



Which factor is most crucial in ensuring that the toy figure remains stable and floats without flipping over?

- A The magnets should be arranged with their opposite poles facing each other.
- B The magnets should be the same strength and arranged with like poles facing each other.
- C The magnets should be placed as close together as possible without touching.
- D The magnets should be arranged in a random set up to balance the forces.

Item	BA-1_Grade 3_11
Identifier	I-SCI-F-S000026_C63864
Standards	SCI.3.3-PS2-4

A student noticed that the cabinet under his mom's sink contained many cleaning chemicals that may be unsafe for his little sister. The student wants to design a latch to keep a cabinet door shut.



Which of the following design criteria should the student prioritize to ensure the latch works effectively using magnets?

- A The magnets should be weak so they can easily be separated.
- B The magnets should be placed far apart to avoid strong attraction.
- C The magnets should be placed inside the door where they won't attract each other.
- D The magnets should be aligned so that their opposite poles face each other.

Item	BA-1_Grade 3_12
Identifier	I-SCI-F-S000026_C35256
Standards	SCI.3.3-PS2-4

To solve a design problem where two objects need to attract each other but also be easily separated by hand, what should be considered when selecting the magnets?

- A Use weaker magnets that allow easy separation by hand.
- B Use very strong magnets that require forceful separation.
- C Use non-magnetic materials to avoid any attraction.
- D Use magnets that are permanently fixed in place to ensure consistent attraction.