

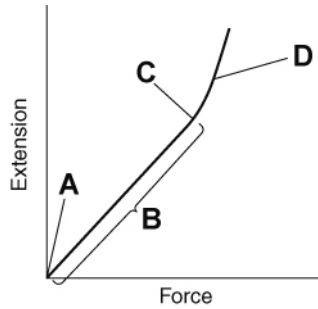
On your answer sheet, write in or circle the correct letter for each question.

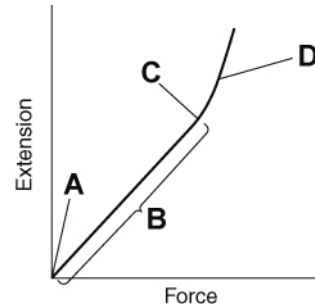
7Ka

- What can forces do?
 - make things start or stop moving
 - change the shape of things
 - make moving things change direction
 - all of the above
- Which answer shows three non-contact forces?
 - magnetism, gravity, friction
 - gravity, friction, upthrust
 - gravity, static electricity, magnetism
 - upthrust, static electricity, friction
- What are the units used for measuring forces?
 - metres
 - newtons
 - kilograms
 - grams
- Which is true?
 - Your weight would be the same on the Earth and on the Moon.
 - Your mass would be the same on the Earth and on the Moon.
 - Your weight would be more on the Moon than on the Earth.
 - Your mass would be less on the Moon than on the Earth.

7Kb

- What is used to measure forces?
 - a force meter with a spring inside
 - a force meter with string inside
 - a ruler
 - a clamp and stand

- An elastic material:
 - does not stretch.
 - stretches and stays in its new shape.
 - stretches and then goes back to its original shape.
 - cannot be squashed.
- What is the extension of a spring?
 - The stretched length of the spring.
 - The length of a compressed spring.
 - The stretched length minus the original length.
 - The length of the spring before it has been stretched.
- At which point on this graph does the extension stop being proportional to the force?
 



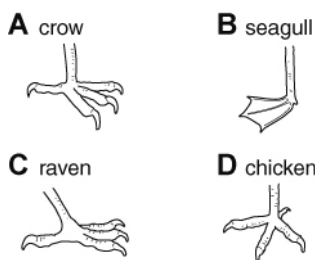
7Kc

- Which of the following sentences about friction is **not** correct?
 - Friction can make an object get hotter.
 - Friction wears car tyres away.
 - Friction slows down a ball rolling in grass.
 - Friction can speed up a falling object.
- Which of these would produce the most friction when they rub together?
 - a rough surface and a smooth one
 - two smooth surfaces
 - two rough surfaces
 - two smooth surfaces with oil between them

- 3 Which example shows unhelpful friction?
- A friction between a tyre and the road
 - B friction in the wheel axles of a bicycle
 - C friction between paper and the point of a pencil
 - D friction between your shoes and the floor
- 4 Which of the following is not an example of a lubricant?
- A grease for bicycle chains
 - B rubber on car tyres
 - C water on swimming pool tiles
 - D oil in a car engine

7Kd

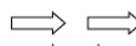



- 1 If the same force is acting on an area, which of these statements is true?
- A The size of the area does not matter.
 - B The bigger the area, the bigger the pressure.
 - C The smaller the area, the smaller the pressure.
 - D The smaller the area, the bigger the pressure.
- 2 If all these birds are the same weight, which bird has the lowest pressure under its feet?



- 3 Why is it easier to cut something with a sharp knife than with a blunt one?
- A The area of the knife edge is large, so pressure is greater.
 - B The area of the knife edge is small, so pressure is greater.
 - C The area of the knife edge is large, so pressure is smaller.
 - D The area of the knife edge is small, so pressure is smaller.

- 4 Which is **not** a unit for pressure?
- A pascals
 - B newtons per square metre
 - C kilograms
 - D newtons per square centimetre

7Ke

- 1 Which pair of forces is balanced?
- | | |
|---|--|
| A  | C  |
| B  | D  |
- 2 Which of these things will not happen if there are unbalanced forces on an object?
- A It will start to move.
 - B It will slow down.
 - C It will continue to move at the same speed.
 - D It will change direction.
- 3 This drawing shows two forces on a car. What will happen to the car?



- A It will speed up.
 - B It will slow down.
 - C It will decelerate.
 - D It will stay at the same speed.
- 4 A car needs a force from its engine to keep moving because:
- A everything needs a force to keep moving.
 - B gravity is acting to slow it down.
 - C it needs a force to balance friction and air resistance.
 - D weight balances friction.