

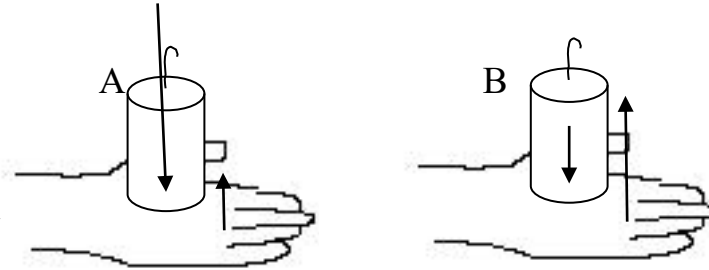
VECTOR DRAWING REVIEW FOR FINAL

1. In which picture
is the hand SINKING?

A

2. Does A have balanced
or unbalanced forces?

UNBALANCES

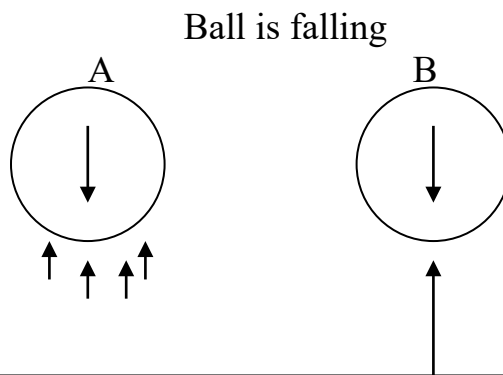


3. Which drawing is correct?

A

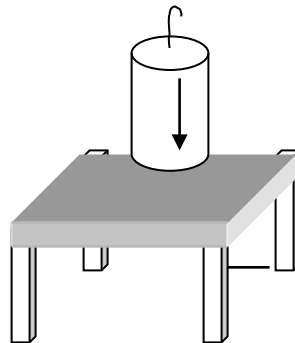
4. Push up forces from the
air are called what?

BUOYANT FORCES



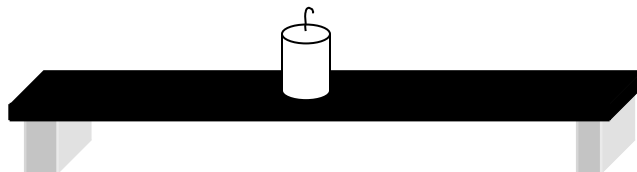
5. What vector is missing?

TABLE



6. What happens to the iron table?

FLEXES



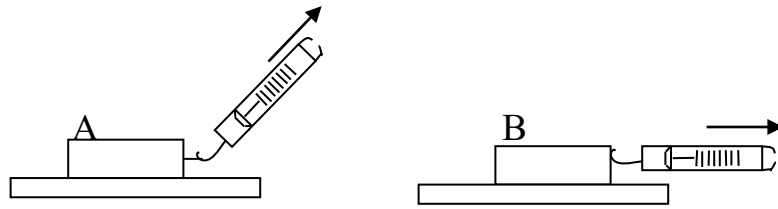
7TH GRADE SCIENCE

7. Which takes more force?

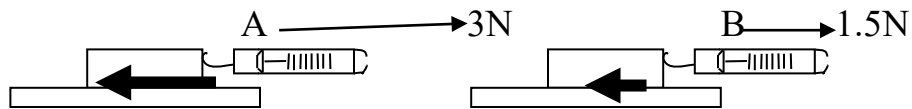
A

8. Why?

FIGHTS GRAVITY



9. Draw in the missing friction arrows. Make sure they are the right size.



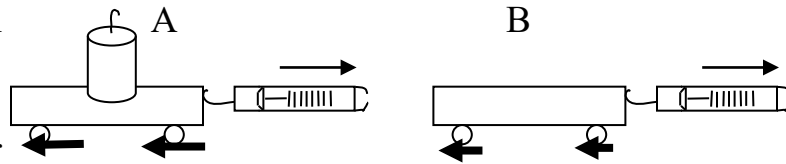
10. Which friction arrow

has the greater magnitude? A

11. Where are the friction vectors located?

UNDER WHEELS

12. Which car gets bigger friction vectors?



13. Where are there more buoyant forces?

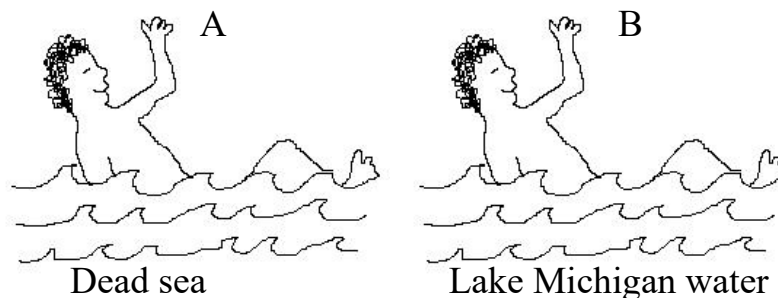
A

14. Who floats higher?

DEAD SEA

15. Why?

MORE BUOYANT FORCES



Please write the definition next to the vocabulary word:

Balanced forces- equal forces resulting in NO motion

Buoyancy/buoyant forces- push up forces in liquids or gases

Compression/compress- to press together

Distort/distortion- to change shape, size, etc.

Elastic limit- maximum stress something takes before being permanently changed or damaged.

Elasticity- tendency to return to original shape after being distorted

Field forces- invisible forces that act at a distance (gravity, magnetism)

Flexing/flex/flexion- to bend

Fracture- to break

Free body diagram- a drawing of forces

Friction- a resisting force that opposes motion

Gravity/gravitational force- force that pulls all objects toward earth

Interaction at a distance- to act from afar without physical contact

Interaction/interact- to act together or affect each other

Magnitude- the amount or value of something

Mechanical forces- visible forces involving contact

Newton- the unit for measuring forces

Resistance- a force that opposes motion

Shearing/shear- opposite forces acting parallel to each other

Spring scale – device used to measure force

Strain- change in length

Stress- the effect of a distorting force

System- group of items acting together as one

Tension- pulling apart

Twisting/twist- a stress that causes motion around an axis

Unbalanced forces- unequal forces that create motion

Vector- a force arrow

What is Newton's first law? **AN OBJECT IN MOTION/ AT REST TENDS TO STAY IN MOTION/ AT REST UNLESS AN OUTSIDE FORCE ACTS UPON IT.**

What is Newton's second law? **FORCE = MASS X ACCELERATION**

What is Newton's third law? **FOR EVERY ACTION, THERE IS AN EQUAL AND OPPOSITE REACTION**

What is the difference between static, sliding, and rolling friction?

STATIC- FRICTION WHEN NOTHING IS MOVING

SLIDING- FRICTION WHEN THINGS ARE SLIDING PAST EACH OTHER

ROLLING- FRICTION BETWEEN WHEELS AND A SURFACE