PS Physics – Unit 1B

Universal Forces

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* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – associated with charged particles.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_ force and \_\_\_\_\_\_\_\_\_\_\_\_\_ force are the only forces that can both \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces act between charged objects or particles such as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces act on certain \_\_\_\_\_\_\_\_\_\_\_\_\_\_, on the poles of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and on moving charges.
  + \*\*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = do not need to be in contact – forces act over a distance
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – one strong and one weak – hold the \_\_\_\_\_\_\_\_\_\_ of atoms together and keep the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from repelling each other and destroying the atom
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ nuclear force acts only on \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_ in a nucleus – holds them together. Acts at a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ than \_\_\_\_\_\_\_\_\_\_\_\_\_\_ nuclear forces.
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ nuclear force acts only over a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Force – an attractive force acting between any two \_\_\_\_\_\_\_\_\_\_\_\_
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ force depends on two factors: \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ apart
  + More \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or less \_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_ gravity
  + Gravity acts over \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ distances
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ universal force
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – center-directed force that continuously changes the direction of an object to make it move in a circle
  + Earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ attraction keeps the \_\_\_\_\_\_\_\_\_\_\_\_ in an orbit around the Earth. This gives us \_\_\_\_\_\_\_\_\_\_\_\_\_. Similarly to how the \_\_\_\_\_\_\_\_\_ orbits Earth, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are also able to orbit Earth!