Relationship between forces, motion and energy revision questions

1. What is Newton’s first law?
2. What is Newton’s second law?
3. What are the units for force?
4. What can we use to measure force?
5. Give some examples where friction is useful
6. Give some examples where friction is not useful
7. How can we increase friction?
8. How can we decrease friction?
9. Calculate the unbalanced force acting on a 10000 kg bus accelerating at 3.5 ms-2.
10. Calculate the acceleration of a car of mass 5000kg with an unbalanced force of 1200N.
11. Calculate the mass of a car accelerating at 5 ms-2 with an unbalanced force of 40000N acting.
12. A girl has a mass of 70 kg on Earth (g = 9.8 Nkg-1)
13. Calculate her weight on i) Earth and ii) the moon where g = 1.6 Nkg-1.
14. What is her mass on the moon?