1 Recall the formula linking **work done**, **force**, and **distance**

2 What does a) 'W' represent b) 'F' represent c) 'd' represent

3 What is the unit for: a) 'W' b) 'F' c) 'd'

4 Define 'work done'

5 A person pushes a trolley 12 m with a resultant force of 10 N. Calculate the work done

6 A motor pulls a mass 45 m with a resultant force of 2,000 N. Calculate the work done

7 A motor pushes a mass 1.2 km with a resultant force of 20kN. Calculate the energy transferred

8 How far is box pushed, if a person does 500 J of work with resultant force of 50 N.

9 How far is box pulled, if a motor does 50 kJ of work with resultant force of 200 N.

10 Calculate the resultant force applied to a box, if 1 J of energy is transferred over a metre.

11 Rearrange the equation for '**distance**'

12 Rearrange the equation for **'force**'

13 A box weighs 10,000 N and is lifted vertically 2m. **Calculate the work done to lift the crate.**

14 A force of 50N makes an object move 5m. **Calculate the work done.**

15 A force of 50kN makes an object move 2000cm. **Calculate the work done.**

16 **Calculate the driving force** applied when a cyclist's KE increases from 0 J to 3000 J in 20m.

17 **Calculate the braking force** when a cyclist's KE decreases from 3000 J to 0 J in 10m.

18 **Calculate the braking force** when a cyclist's KE decreases from 1.5 kJ to 500 J in 200cm.

19 A box weighs 100 kN and is lifted vertically 20m. **Calculate the work done to lift the crate.**

20 A force of 500 kN makes an object move 0.05 km. **Calculate the work done.**

21 A force of 50 kN makes an object move 2000cm. **Calculate the work done.**

22 **Calculate the driving force** applied when a cyclist's KE increases from 100 J to 3000 J in 2m.

23 **Calculate the braking force** when a cyclist's KE decreases from 6000 J to 0 J in 0.05 km.

24 **Calculate the braking force** when a car's KE decreases from 15 kJ to 500 J in 200cm.