

## Answer Key

### Testname: ELECTRO FINAL PRACTICE

- 1) conductors.
- 2) the same number of protons as electrons.
- 3) 0.45 N
- 4)  $4.5 \times 10^8$  N/C
- 5) a negative ion.
- 6) 320 N
- 7) It doubles.
- 8) 0.189 N
- 9) The charges exert forces on each other equal in magnitude and opposite in direction
- 10) 3.7 m
- 11) is one-fourth its original value.
- 12) It increases to 4 times its original value.
- 13) No, they will never attract.
- 14) acquires a negative charge.
- 15) 95 km
- 16) insulators.
- 17)  $1.25 \times 10^{13}$
- 18) No.
- 19) 25 nC
- 20) away from the 5.0 C
- 21)  $5.8 \times 10^{-8}$  N/C
- 22) 9F
- 23)  $6.25 \times 10^{18}$ .
- 24) 0.18 N left
- 25) increases to the right.
- 26) radiate outward.
- 27) positive charge.
- 28) 1/16 N
- 29) quadruples.
- 30) 0.072 N right
- 31) 200 N/C away from the charge