Electric Field Supplemental Worksheet

Name: _____

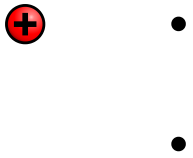
Use this worksheet as a guide as you navigate the simulation/game. These prompts help to highlight some of the key points you should take away after interacting with the simulation/game.

1. Sketch the E-field lines created by a single positive charge.

2. Sketch the E-field lines created by a single negative charge.

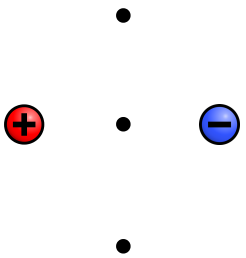
3. Sketch the E-field lines created by the **dipole** (2 charges of equal strength & opposite sign).

4. Sketch an arrow in the direction of the E-field created by this positive charge at each of the black dots.

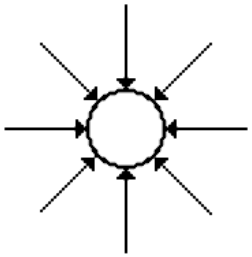


5. Sketch an arrow in the direction of the E-field created by this negative charge at each of the black dots.

6. Sketch an arrow in the direction of the electric field created by this dipole charge at each of the black dots.

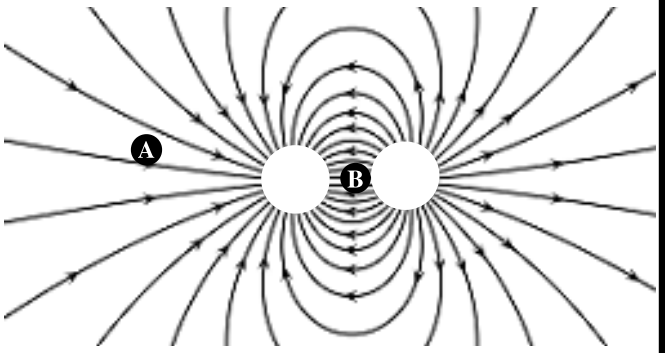


7. Fill in the sign of this charge based on the E-field.



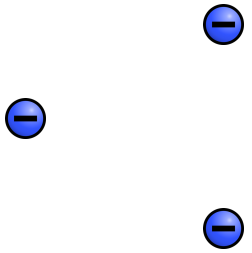
8. Circle the correct answer. The field is stronger closer to/ farther from the charge.

9. Fill in the sign of the charges based on the E-field.

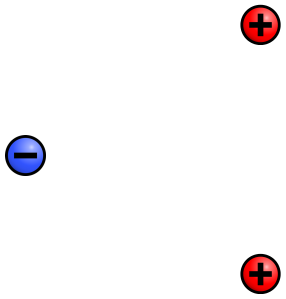


10. Is the field stronger at point A or B?

11. Sketch the E-field lines produced by these 3 charges.



12. Sketch the E-field produced by these 3 charges.



13. How would the E-field in #3 change if the negative charge doubled in strength.

14. Describe what's wrong with this representation of an E-field.