Physics - Key Stage 4 - Electricity

Electric Fields Worksheet

Miss Walrond



Electric Fields - Positive charges

- 1. Draw a field diagram for a positive point charge.
- 2. Label where the field is strongest.
- 3. Label where the field is weakest.



Electric Fields - Negative charges

- 1. Draw a field diagram for a negative point charge.
- 2. Label where the field is strongest.
- 3. Label where the field is weakest.



Independent Task - Electric Fields part 1

Complete the sentences.

- 1) Electric fields exist around all....
- 2) When the field lines are closest together it shows ...
- 3) When the field lines are furthest apart it shows...
- The field lines show the direction of the force felt by ... 4)



Independent Task - Electric Fields between objects part 1

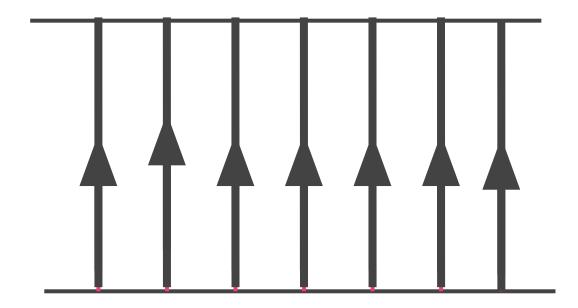
Draw the electric fields in these diagrams.

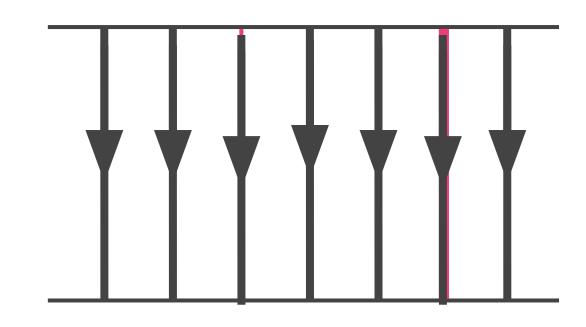




Independent Task - Electric Fields between objects part 2

Identify if the plates are positive or negative.







Electric Fields - between charges

1) Draw a field diagram between a positive and a negative charge. 2) Which way are the field lines shown?



Answers



Review: Independent Task - Electric Fields

Complete the sentences.

- 1) Electric fields exist around all **charged objects**.
- 2) When the field lines are closest together it shows the field is strongest.
- 3) When the field lines are furthest apart it shows the field is weakest.
- The field lines show the direction of the force felt by a **positive** charge.

