**Conductors and Insulators**

**Conductors and Insulators**

 **A. Complete the following Venn diagram.**

Materials that conduct electricity **well**:

***Conclusion***:

Materials that **do not** conduct electricity:

***Conclusion***:

Con

Materials that conduct **some** electricity:

***Conclusion***:

**C. Electrical wire is the medium through which electricity is carried to and through each individual home that uses electrical power. It is made of copper (metal) that is covered by a plastic/rubber**.

 (i) Identify the conducting and insulating material.

 (ii) Why must the wires be covered with a plastic? Explain in relation to the flow of electrons.

 **D. Why do you feel more static shocks in the winter?**

**Conductor & Insulator Venn diagram - Answers**

Materials that do not conduct electricity (insulators):

* Rubber
* Glass
* Plastic
* Paper
* Pencil

Conclusion: Most non-metals are insulators

Con

Materials that conduct electricity well:

* Copper
* Tin
* Salt solution

Conclusion: Most metals are good conductors

Materials that conduct some electricity:

* Iron
* Water
* Sugar solution

Conclusion: Some materials are harder to predict