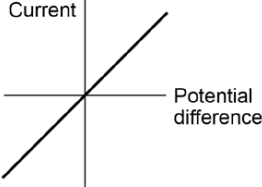
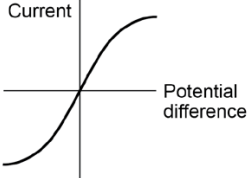
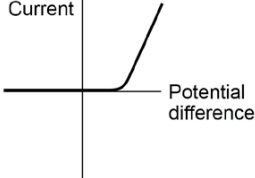


| P4 – electrical circuits | Recall answers |
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| 1. What happens to the resistance in an ohmic conductor as the current changes? (as long as the temperature remains constant) | It stays the same |
| 2. What does the current/p.d. graph look like for an ohmic conductor? |  |
| 3. What is the relationship between current and potential difference for an ohmic conductor (as long as temperature remains constant)? | Current and p.d. are directly proportional to each other. (e.g. as one doubles, the other also doubles) |
| 4. List 4 components for which the resistance will change as the current changes. | <ol style="list-style-type: none"> 1. Filament lamp 2. Diode 3. LDR 4. Thermistor |
| 5. What happens to the resistance of a filament lamp as the temperature increases? | Resistance increases |
| 6. What does the current/p.d graph look like for a filament lamp? |  |
| 7. What is the function of a diode? | To allow current to flow in one direction only. |
| 8. Why does a diode allow electricity to flow in one direction through it? | The diode has very high resistance in the reverse direction. |
| 9. What does the current/p.d graph look like for a diode? |  |
| 10. What happens to the resistance of a thermistor as temperature increases? | The resistance will decrease. |
| 11. Where might you find a thermistor being used? | In a temperature sensitive circuit e.g thermostat to control a heating system. |
| 12. What happens to the resistance of an LDR as light intensity increases? | The resistance will decrease. |
| 13. Where might you find an LDR being used? | In a light sensitive circuit e.g circuits controlling street lamps/lighting. As it gets dark, circuits are set up so the lamp switches on. |