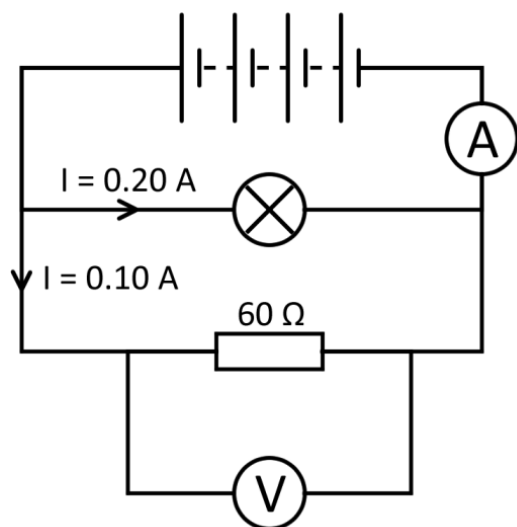


Name:

Class:



A circuit was set up as shown in the diagram.



Each cell provides a potential difference of 1.5 volts.

- i. What is the total potential difference provided by the four cells in the circuit?

Total potential difference = ... volts

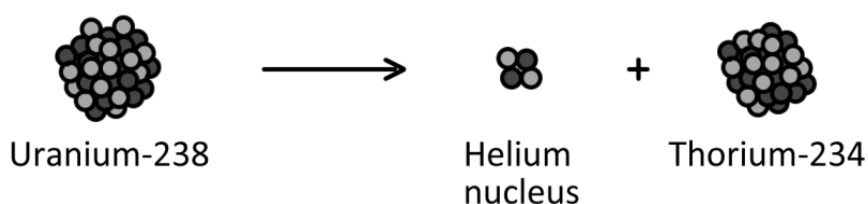
- ii. What will be the reading on the voltmeter?

.....

- iii. The current through the lamp is 0.20 amps. The current through the resistor is 0.10 amps. What is the reading on the ammeter?

.....

Some rocks inside the Earth contain uranium-238, a radioactive isotope of uranium. When an atom of uranium-238 decays, it gives out radiation and changes into a thorium-234 atom.



- i. What type of radiation is emitted when a uranium-238 atom decays?

.....

- ii. From which part of a uranium-238 atom is the radiation emitted?

.....

- iii. Uranium-238 has a half-life of 4500 million years.

When the Earth was formed, there was twice as much uranium-238 in the rocks as there is now. What is the age of the Earth?

.....