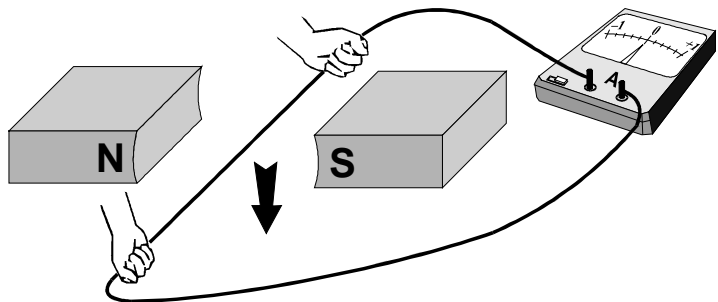


The Generator Effect

1. (a) The diagram shows one way of demonstrating a particular electrical effect.



As the wire is moved downwards between the poles of the magnet the ammeter needle swings to the right.

(i) What name is given to this electrical effect?

.....

(1)

(ii) What happens to the ammeter needle when the wire is moved upwards between the poles of the magnet?

.....

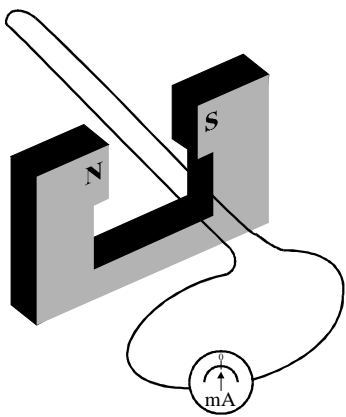
(1)

(iii) When the wire is held stationary between the poles of the magnet the ammeter needle does not move. Explain why.

.....
.....
.....
.....

(2)

2. The diagram shows a loop of wire which is being moved rapidly down between the poles of a magnet.



What will be the reading on the milliammeter as the loop of wire moves down?

.....

Give a reason for your answer.

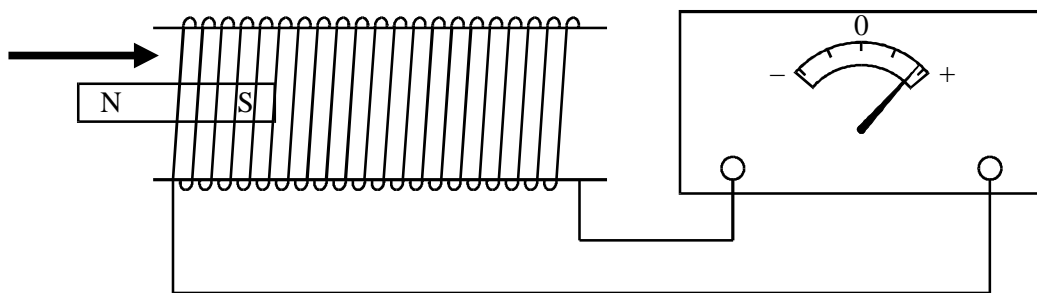
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(2)

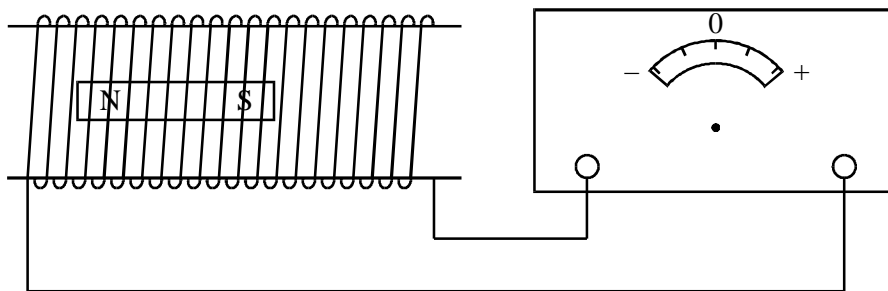
3. (a) The diagram shows a magnet being moved into a coil of wire.

The reading on the meter is shown in the diagram.



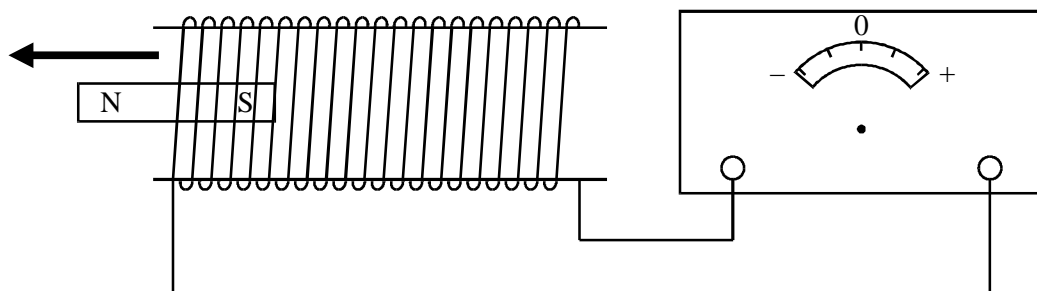
Draw on the diagram the meter reading that you would expect to get in each of the following cases.

- (i) The magnet is at rest inside the coil.



(1)

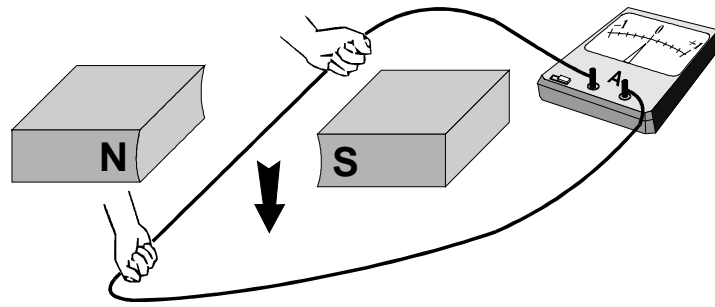
- (ii) The magnet is moved out of coil.



(1)

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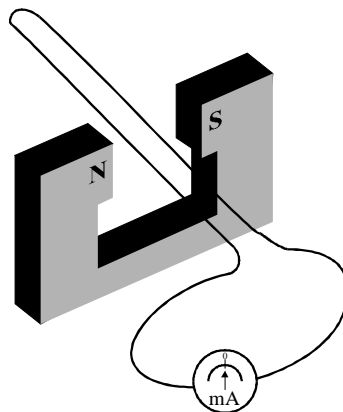
(1)

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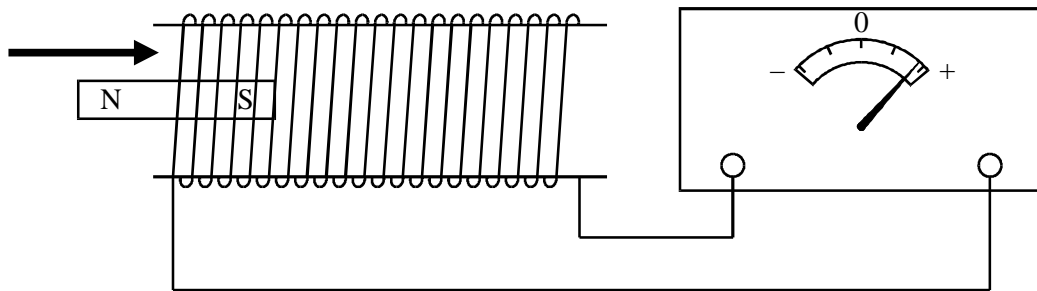
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(2)

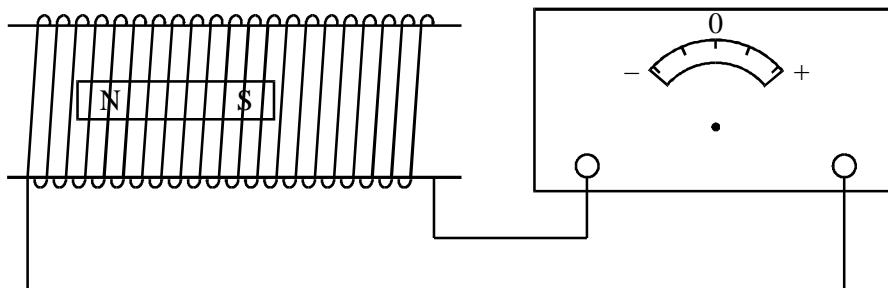
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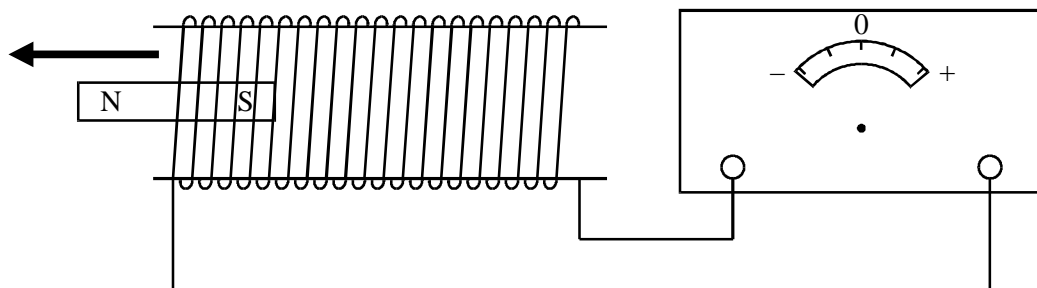
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(1)