

Magnetism and Electricity

1. If a bar magnet is cut in half it will:

have only one pole Become two smaller magnets

Become unmagnetized will have 2 south poles

2. The small groups of atoms that behave like small magnets inside a large magnet are called:

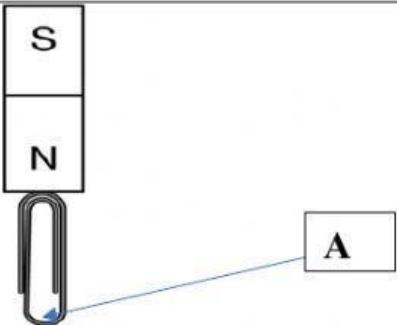
A magnetic domain Bar magnet Magnetic grouping Poles

3. What is one way to demagnetize a magnet quicker?

Strike it with a hammer Move it into a magnetic field

Rub the opposite magnetic pole onto it Break the magnet in half

4. The figure below shows a bar magnet with two metal paper clips hanging from it. What pole is induced at the **end** of the paper clip A?

	<p>North pole</p> <p>South pole</p> <p>East pole</p> <p>It has no pole</p>
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5. In a magnet

the magnetic domains are aligned magnetic domains are in a random order

half of the magnetic domains point one way and half point the other

6. A permanent magnet

A. has no magnetic domains until a magnet is near it

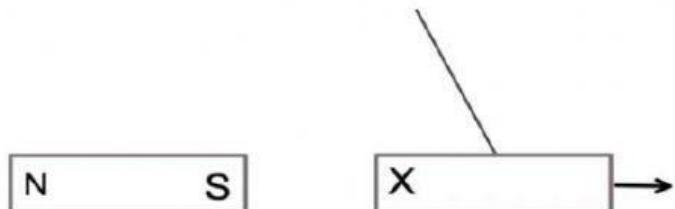
B. has magnetic domains aligned only when another magnet is near it

C. has magnetic domains aligned all the time

D. has no magnetic domains

7. **Figure 1** below shows a magnet held close to the second magnet which is suspended by a light cotton thread.

Figure 1



State the type of pole found at X?

South West North No pole

8. Iron, Nickel, and Cobalt are examples of elements with atoms arranged in tiny areas called: groups domain magnetism poles

9. Magnetic materials are:

- A only made of iron
- B. made from any metal
- C iron, nickel and cobalt
- D. small magnets

10. In demagnetised steel, the domains:

- A are aligned in the same direction
- B are in different directions
- C are not present

11. To demagnetize a magnet, one can:

A hit it for a period of time B heat it for some time
C. drop it repeatedly D. All of the above

12. The north pole of a magnet will attract:

- A. the north pole of a magnet
- B. the south pole of a magnet and any demagnetised iron
- C. both poles of a magnet and any magnetic materials

13. The ends of a magnet are called:

- A fields
- B poles
- C domains
- D contact forces

14. If two south poles are close to each other, they will:

attract each other repel each other have no effect on each other

15. Repulsion between a magnet and another object indicates that:

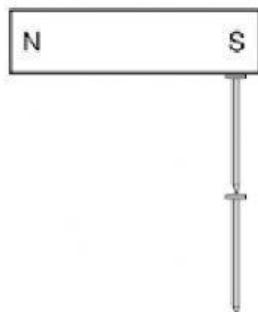
- A the other is made of a metal that is non-magnetic
- B one has a north pole and the other has a south pole
- C the other object is also a magnet

16. The lines of a magnetic field go from:

- A north pole to south pole
- B south pole to north pole
- C in any direction
- D from east to West

17. **Figure 1** shows two iron nails hanging from a bar magnet.

The iron nails which were unmagnetised are now magnetised.



Complete the sentence.

The iron nails have become _____ magnets.

18. The magnetic field of a magnet:

- A is always as strong anywhere around a magnet
- B only exists on the poles themselves
- C weakens as the distance from the magnet increases

19. A temporary magnet which behaves like a magnet when an electric current is passed through is called _____.

20. If pole A of a magnet repels pole B of a second magnet, and pole B attracts pole C of a third magnet, what can be said about pole A and pole C?

- A. A and C are both north poles
- B. A and C are like poles
- C. A and C are unlike poles
- D. A and C have very strong poles

21. If a person winds a coil of wire around a steel rod, and then passes an electric current through the wire, then:

- A. the steel rod becomes an electromagnet
- B. the steel rod becomes electrified and
- C. Steel rod will bend
- D. The steel rod give off sparks

22. Drag and drop the following terms to their definition or example

if you weigh a given substance five times, and get 3.2 kg each time	
the closeness of a measured value to a true or known value.	
the same person repeats the investigation using same method and equipment and obtains the same results.	
the investigation is repeated by another person, or by using the same method or techniques, and the same results are obtained.	

Repeatability

Reproducibility

Accuracy

Precision