Kay wanted to find out if a fan affected the temperature of a room. She set a 3-speed fan on a table. She hung a thermometer from the ceiling so that it was directly in front of the fan, three feet away. She waited five minutes, measured the room temperature, and recorded it. Next she turned on the fan at low speed, let it run for five minutes, and recorded the temperature. She did the same for medium and high speeds, and repeated the experiment four more times.

(IA3a)

7. How will Kay know the results of her experiment?

A describe the temperature in Celsius for each trial
B record high, medium, and low fan speeds
C compare data after the experiment
D subtract the cooler temperature from the warmer one

(IA3a)(IB1a)

8. Select a reasonable hypothesis for this investigation.

A If the fan speed increases, the air in the room will become moist.
B At a high fan speed, the room will be cooler.
C The temperature of the room will change the fan speed.
D If there is moisture in the air, the air will not be cool.

(IA3a)(IB1b)

9. What variable was changed?

A size of the fan
B five minute wait time
C speed of the fan
D type of thermometer

(IA3a)(IB1e)

10. How could the results be shown?

A draw a picture
B average all the temperatures and report one result
C average the trials and put the data on a line graph
D describe how the experimant was set up

(IA3a)

11. To measure the weight of an object, you would use a:

A telescope
B microscope
C graduated cylinder
D balance scale

(IA3a)

12. To find the temperature during an experiment you would use a:

A graduated cylinder
B thermometer
C spring scale
D balance scale

(IA3a)

13. To measure volume of a liquid you would use a:

A telescope
B microscope
C graduated cylinder
D balance scale

(IIIA2e)

14. The sun is very bright. It is so bright that it is dangerous to look at for more than a few seconds. Which of the following way is NOT a safe way to look at the sun for long periods of time?

A Use a telescope with a special sun observation projection plate.
B Look at it through *very* dark glasses (welder's lens).
C Look at it directly when it's very red and near the horizon (10 minutes before sunset).
D Look at it in a mirror.

(IIIA2f)

15. Which of the following are ways of keeping or telling time that have been used by people for thousands of years?

I. grandfather clocks
II. sundials
III. watches
IV. sand clocks
V. water clocks

A I only
B II, IV, and V
C I, II, and III
D all of them

(IIIB2a)

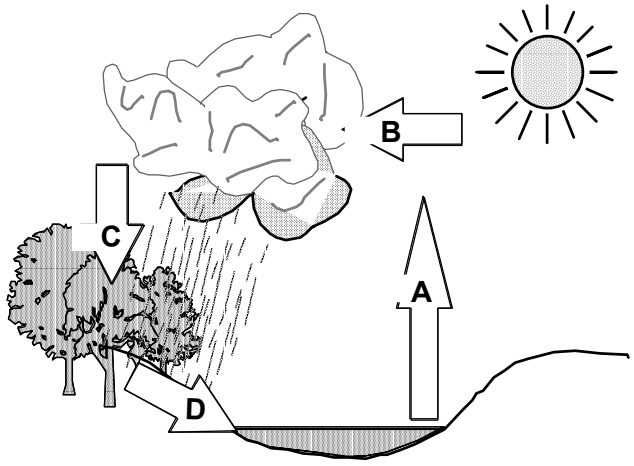
16. What is the measure of the amount of heat in the atmosphere?

A temperature
B atmosphere
C front
D air pressure

(IIIB1b)

17. What is the movement of water between the ground and air by evaporation, condensation, and precipitation called?

A adaptation
B the water cycle
C conservation
D the rain circle



(IIIB1b)

18. What must happen to water before it rains?

A It must condense.
B It must turn to snow.
C It must turn to fog.
D It must turn to dew.

(IIIB1b)

19. What is *not* necessary for precipitation?

A cold weather
B evaporation
C condensation
D the sun's energy

(IVB1d)

17. Which of these are NOT conductors?

A aluminum and copper
B plastic and wood
C lemon juice and tap water
D the human body and a salt solution

(IVB1d)

18. The list below includes pairs of a conductor and a non-conductor. Find the one set of pairs that is different.

A metal spoon, plastic straw
B aluminum foil, rubber eraser
C chalk, glass
D copper penny, wood pencil

(IVB1e)

19. What materials are needed to produce an electrical current?

A wire only
B battery only
C bulb and battery
D battery and wire

(IVB1h)

20. What form of static electricity is harmful?

A rubbing two balloons together
B combing your hair
C electric shock from a doorknob
D lightning

(IVB2a)

21. Which of the following materials would be picked up by a magnet?

A steel
B rubber
C copper
D plastic

(IVB2e)

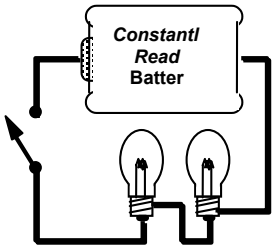
22. A wire wrapped around a magnet is an example of a/an:

A electromagnet.
B closed circuit.
C open circuit.
D parallel circuit.

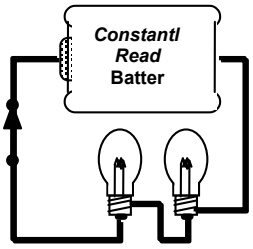
(IVB1e)

23. Which figure below shows a circuit that is connected in series and is complete?

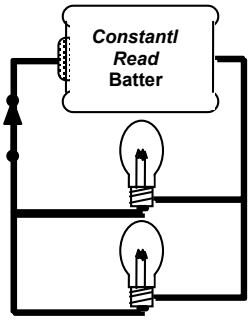
A



B



C



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