Subject: Grade 6 Natural Sciences **Topic:** Natural Science: Exam Term 2

Total: 106 Marks

1. true 2 marks

Explanation:

Vitamins A, D, E and K can only be digested, absorbed and transported in conjunction with fats.

2. gas | gaseous 3 marks

Explanation:

Gases have large spaces between their particles. If a heavy gas such as carbon dioxide is in a container it can be poured out of the container. This will only happen with gases that are heavier than air.

3. raw | solid | dirty 6 marks

Explanation:

4. solute | solvent | solution

6 marks

Explanation:

I want to make a cup of hot chocolate. The chocolate powder is my solute. The hot water is my solvent. When I mix them together I have created a solution.

5. radicle | plumule 4 marks

Explanation:

The RADICLE is the first root, while the PLUMULE is the tiny stem and leaves.

6. iodine 3 marks

Explanation:

The colourless starch solution will become a blue-purple colour.

7. B: Fehling's A and Fehling's B 4 marks

Explanation:

The glucose solution will turn deep orange. This shows that it contains sugar.

8. treatment | water treatment | water treatment plant | purification | water purification | water purification plant

3 marks

Explanation:

The process of cleaning the water is called water treatment, and the place where it happens is called a water treatment plant.

9. true 2 marks

Explanation:

The particles of a solid vibrate. When a solid is heated the particles vibrate faster because the heat energy is changed into kinetic energy (movement energy).

10. inside | outside 4 marks

Explanation:

An endoskeleton is found inside a human or animal, while an exoskeleton is found on the outside.

11. B: insoluble 4 marks

Explanation:

The insoluble substance cannot mix with the particles of water.

12. leaf | leaf 4 marks

Explanation:

13. C: A and B 4 marks

Explanation:

The most common solvent for nail polish is acetone, a powerful and effective chemical that can be harsh on skin and nails. Acetone can also be used to remove artificial nails, which are usually made of acrylic and gel. A less harsh nail polish removal is ethyl acetate, the active ingredient in non-acetone nail polish removers, which also often contains isopropyl alcohol. Ethyl acetate is generally the solvent in nail polish.

14. oxygen 3 marks

Explanation:

15. D: tooth decay 4 marks

Explanation:

Fluoride helps prevent tooth decay. It can be found in minute quantities in tooth paste and drinking water.

16. A: sardines 4 marks **Explanation:** Both cooking oil and sardines contain fats that are used to provide energy. However, sardines contain the most healthy oils and fats. 17. true 2 marks **Explanation:** The leaves absorb sunlight during this process. 18. unsaturated 3 marks **Explanation:** Once no more solute will dissolve we say the solution is saturated. 19. solid 3 marks **Explanation:** The particles of a solid vibrate around a fixed position. 20. mineral | vitamin 4 marks **Explanation:** Iron is a mineral and Thiamine is a vitamin. 21. B: carbon dioxide 4 marks **Explanation:** Substance B is a liquid. The particles of subsctance A move around more, which means A must be a gas. Water and plastic are not gases but carbon dioxide is a gas. 22. false 2 marks **Explanation:** Sulphur does not dissolve in water. Sulphur is insoluble in water. 23. A: distillation 4 marks **Explanation:** When steam from boiling water condenses, the condensed water is pure and is known as distilled water. 24. true 2 marks **Explanation:**

A baby is not born with knee caps. These develop by about the age of three years old.

25. clean | unsafe | dangerous

6 marks

Explanation:

This sign indicates that the water source is polluted. The water is not safe to drink or swim in. It could be very dangerous to your health if consumed.

26. dissolved | dissolve

3 marks

Explanation:

Substances which cannot be dissolved are called insoluble, e.g. oil, iron filings and wood chips are insoluble in water.

27. false

2 marks

Explanation:

The water acts as the solvent as it dissolves the salt. A solute is the substance dissolved in a given solution.

28. C: A, B and D

4 marks

Explanation:

In order for the solute to dissolve it must be stirred, heated or shaken. If the solute is just left in the solution then it will not dissolve properly and sediment will form.

29. solution | mixture

4 marks

Explanation:

Substances that are soluble in water are solutions, e.g. salt in water. Substances that are insoluble in water are mixtures, e.g. sand in water.

30. embryo

3 marks

Explanation:

This is the part which will grow into a new plant.

Total: 106 Marks