**Subject:** Grade 4 Natural Sciences **Topic:** Natural Science: Exam Term 2

Total: 85 Marks

1. rubber | flexible 4 marks

## **Explanation:**

Rubber is soft and bends easily. Wood is hard and does not bend easily.

2. B: hollow pillar 4 marks

## **Explanation:**

Pillars such as chimneys are great examples of circular hollow pillars. They are also a structure used when supporting objects like wind turbines and street lights.

3. false 2 marks

## **Explanation:**

Adding sand to cement makes it stronger, but, if you add too much sand the cement is going to crack easily.

4. false 2 marks

## **Explanation:**

Evaporation is when a liquid changes to gas. When water boils it changes from water (liquid) to water vapour (gas). When a solid changes to a liquid we say that the solid has melted.

5. shell | natural 3 marks

## **Explanation:**

Because the shell can support itself without pillars or beams, it's considered a natural shell structure.

6. water | Water 3 marks

### **Explanation:**

Water activates the pectin in jelly. Pectin is a substance that feels squishy.

7. plastic 3 marks

### **Explanation:**

Plastic is versatile and can be soft or hard, flexible or rigid.

8. C: stiff or flexible 4 marks

## **Explanation:**

Plastic is a verstile material as its properties are so variable. It can be soft or hard, stiff or flexible, light or heavy.

A flexible plastic is used to make the rain jacket, while a stiff plastic is used to make the ruler.

9. reproduction | reproducing

3 marks

## **Explanation:**

Reproduction occurs when living things make offspring.

Pollination is part of the reproduction of flowering plants.

10. light | absorbent | brittle

6 marks

#### **Explanation:**

Even fragile materials like feathers, clay and tissue paper are useful and have their own properties that descibe them.

11. C: mountain tortoise 4 marks

## **Explanation:**

A mountain tortoise is a reptile. Reptiles are cold-blooded, scaly animals. More than 400 reptiles are found in Southern Africa.

12. herbivores | herbivorous

3 marks

### **Explanation:**

Herbivorous animals eat seeds, grass, leaves and other plants. They get all their nutrients from the soil, not from meat.

13. water 3 marks

## **Explanation:**

Yeast is an organism that needs food, water and warmth in order to grow. The sugar provides the food.

14. Condensation | the gas loses heat

4 marks

## **Explanation:**

**Condensation** is the process when a gas changes state to form a liquid.

During this process the gas loses heat .

**Evaporation** is the process when a liquid becomes a gas.

15. false 2 marks **Explanation:** Iron is extremely cold and damp. You poor dog will freeze! 16. A: sugar crystals. 4 marks **Explanation:** When all the water is evaporated from sugar water, the leftover sugar forms beautiful crystals. 17. A: a sweet syrup. 4 marks **Explanation:** Heating sugar will make it change its phase from a solid to a liquid. 18. high | low 4 marks **Explanation:** The particles of solids are MUCH closer to one another than those of gases. 19. predators | hunt 4 marks **Explanation:** Young predators are taught by their parents to be skilled hunters. 20. folding | weaving | kneading 3 marks **Explanation:** When materials are folded or layered they increase in thickness and strength. If a trampoline is stretched, it has the strength to allow someone to jump on the material. When we weave paper, twine or rope together to form a basket the weave keeps the material together strengthening it and allowing it hold/carry more weight. 21. true 2 marks **Explanation:** The young animal drinks milk from its mother. 22. energy | food 4 marks **Explanation:** Food contains stored energy. Sunlight is used by plants to produce food in their leaves. 23. B: a seed starting to grow 4 marks

#### **Explanation:**

In order for a seed to germinate, it needs water and warmth. Once a seed has germinated it starts to grow into a seedling.

24. C: hold water 4 marks

# **Explanation:**

Paper can be used to make books, even cover them. Paper bags can carry lots of things like files and groceries. It cannot however store water, as it does not have any waterproofing properties.

25. false 2 marks

# **Explanation:**

When materials are added together they form a brand new material with brand new properties.

Total: 85 Marks