Grade 7 Natural Science Worksheet

Assessment Task: Environment: pollution, packaging

Packaging

Question 1: The packaging of food

How much packaging is used on the food you eat? Do some products have more than one layer of wrapping? Do they need it? Create a chart like the one below in your workbook. Analyse the way 20 food items you have at home are packaged.

No packaging	One layer	Two layers	More than two layers
E.g. loose fruit and vegetables.	E.g. milk in a bottle.	E.g. a can of soup in a tin with paper wrapping.	E.g. a microwave meal with tinfoil dish, plastic wrapping and cardboard box.

[20 marks]

Question 2: Analyse the packaging

1. Now analyse what the packaging is made of. Create a table like the one below, to record your results. Put a tick in the second column everytime that sort of packaging is used.

[20 marks]

Grade 7 Natural Science Worksheet

Packaging material	Number of times used	Total
Cardboard		
Plastic		
Paper		
Polystyrene		
Metal		

2. Look at your results and consider: Which material is used the most? Which material is least harmful to the environment? Why was the material used? Could a better material have been used in any of the cases?

3. Write a paragraph answering these questions.

[20 marks]

Grade 7 Natural Science Worksheet

Rubric to assess paragraph

Criteria	Level 4 [4]	Level 3 [3]	Level 2 [2]	Level 1 [1]
Which material is used the most?	Accurate answer derived from table.	Mostly accurate answer derived from table.	Answer is limited or incomplete.	Answer is inaccurate.
Which material is least harmful to the environment?	Accurate answer based in research.	Mostly accurate answer based in research.	Fairly accurate answer.	Inaccurate answer.
Why was the material used?	Very good understanding of the packaging needs and the product.	Good understanding of the packaging needs and the product.	Fair understanding of the packaging needs and the product.	Poor understanding of the packaging needs and the product.
Could a better material have been used in any of the cases?	Insightful understanding of the problem and innovative suggestions offered.	Good understanding of the problem and good suggestions offered.	Limited understanding of the problem and limited suggestions offered.	Poor understanding of the problem and poor suggestions offered.
Paragraph	Well written with logical development and excellent attention to grammar and spelling.	Well written with good attention to grammar and spelling.	Fairly well written with fair attention to grammar and spelling.	Poorly written with poor attention to grammar and spelling.

Grade 7 Natural Science Worksheet

Suggested Solutions

Question number	Possible marks	Solution
1	20	Mark table according to learner responses; this can be peer assessed.
2.1	20	Mark table according to learner responses; this can be peer assessed.
2.2	20	See rubric in Appendix of Assessment Tools.

Appendix of Assessment Tools

Rubric to assess paragraph

Criteria	Level 4 [4]	Level 3 [3]	Level 2 [2]	Level 1 [1]
Which material is used the most?	Accurate answer derived from table.	Mostly accurate answer derived from table.	Answer is limited or incomplete.	Answer is inaccurate.
Which material is least harmful to the environment?	Accurate answer based in research.	Mostly accurate answer based in research.	Fairly accurate answer.	Inaccurate answer.
Why was the material used?	Very good understanding of the packaging needs and the product.	Good understanding of the packaging needs and the product.	Fair understanding of the packaging needs and the product.	Poor understanding of the packaging needs and the product.
Could a better material have been used in any of the cases?	Insightful understanding of the problem and innovative suggestions offered.	Good understanding of the problem and good suggestions offered.	Limited understanding of the problem and limited suggestions offered.	Poor understanding of the problem and poor suggestions offered.
Paragraph	Well written with logical development and excellent attention to grammar and spelling.	Well written with good attention to grammar and spelling.	Fairly well written with fair attention to grammar and spelling.	Poorly written with poor attention to grammar and spelling.