QUESTION 1

1.1 A √
1.2 B
1.3 A √
1.4 B √
1.5 A √
1.6 A √
1.7 D √
1.8 A √
1.9 C √
1.10 B √

QUESTION 2

2.1.1 True √
2.1.2 True √
2.1.3 True √
2.1.4 True √
2.1.5 False √

3.1.1 I am going to make the roofing of a house that will make use of tiles/ corrugated iron or asbestos. 2
3.1.2 A. Rafters 1
   B. King post 1
   C. Queen post 1
   D. Strut 1
3.2.1 Lack of strength 1
3.2.2 Lack of stiffness 1
3.2.3 Lack of stability 1
3.3 To strengthen the structure 1
3.4 a) Cable stay bridge 1
   b) Beam Bridge 1
   c) Suspension bridge or any other type of a bridge 1
3.5 a) Plastics could be recycled 2
   b) They could also be used to make new projects like plastic door mat 2
   c) They could place these plastics in the rubbish bean 2
3.6 Burning plastic causes fumes that pollute the air 2
QUESTION 4

4.1 Paper, because it can decompose within days. üü

(2)

4.2 Paper, because it is made from trees. üü

(2)

4.3 Plastic, because it is water proof. üü

(2)

4.4 Good idea, because customers would choose to re-use plastic bags to avoid buying them every time, and they would not throw plastic around knowing they bought them üü

(4)

4.5 Yes, because animals eat plastic which is indigestible and end up killing them. üü

(2)

4.6 Thin plastic is not degradable while thick plastic is degradable, can be re-used and recycled. ü ü

(2)

4.7 Clothing shops, because clothes are dry, light in weight and expensive to cover the manufacturing costs of paper bags. üüüü

(4)

4.8 Bottles, papers, cardboard boxes, plastic bags and plastic containers. üüüüü

(5)

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QUESTION 5

5  5.1 a) There should be beans in the school yard for learners to put plastics in.  2

b) Plastic recycling project could be started for learners to put used plastics to good use.  2

c) Learners could be engaged in used plastic project like plastic door mats to put used plastic to good use.  2

5.2 Burning plastics causes fumes that pollute the air that will in turn be harmful when breathed in.  2

5.3.1 If water is pumped from the river through pipes to be cleaned of for irrigation purposes, this dirt may block the pipes.  1

5.3.2 It could harm the lives of animals that live in the river like fish.  1

5.3.3 It can lead to the breeding of mosquitoes and other dangerous insects.  1

5.3.4 River water is mostly used for irrigation and if polluted, it may be harmful to the small plants and destroy such.  1

5.4 Bio-degradable materials are materials that can be broken down into small pieces that can be decomposed.  2

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**Question 6**

<table>
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<th></th>
<th>6.1.1</th>
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<tr>
<td></td>
<td>B</td>
<td>Dimension line</td>
</tr>
<tr>
<td></td>
<td>C</td>
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<td></td>
<td>D</td>
<td>Hidden details line</td>
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<td></td>
<td>E</td>
<td>Center line</td>
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</tbody>
</table>

**6.1.2**

[Diagram showing multiple lines with annotations: 1 switch for each line and 1 for the door and window]

**Question 7.**

a) Biodegradable material is material that can be decomposed by bacteria/nature.

b) Danger to animal life, environmental pollution. (any relevant answer)

c) Recycle, reuse.

d) Paper, wood/timber, fish cans.

**Question 8**

a. Martha loses stationery because she does not have a pencil case. (2)

b. I am going to design and make a pencil case using biodegradable material. (2)

c. Length 32 cm, Biodegradable material, have a replaceable lid. (4)

**TOTAL: 100**