3.4 Purposes of metal. 
3.4.1 Mechanism 
3.4.2 Functioning structure 
3.4.3 Mechanical advantage

Question 3 - Give a definition for each of the following:
(1) 2.5 people who do not live in one place for a long time.
(2) 2.4 When many parts work together to carry out the same function.
(3) 2.3 Bougainville hand drawings.
(4) 2.2 Strong focusing frame structure.
(5) 2.1 A short and clear statement that outlines the problem or need.

Question 2 - Write one word to describe each of the following.
(1) D. Design lines
   C. Contours
   B. Construction lines
   A. Center lines

1.7 Rose is shown in the complete drawing.

1.6 An example of a second class lever is a...

D. Dimension C. Hidden lines B. Scale A. Conventions

In real life it is shown as...

1.5 The relationship between the size of a drawing and its actual size.

1.4 One of the stages of the technological process is the...

D. Machining advantages C. Function B. Load A. Effect

1.3 The input force that is needed in order for the lever to work is

D. Breaking structure C. Solid structure B. Frame structure A. Shell structure

1.2 A structure made up of different members joined together forms

D. Hydraulics C. Pneumatics B. Master cylinder A. Pneumatics

1.1 A machine or a tool that operates by compressed or pressurized air

Choose the correct answer and write only the letter next to the question.

Grade 7 - Multiple Choice

Total: 30

Hertford High Primary School
November 2018
**Question 4**—Match Column A with Column B. Write the chosen letter next to the correct number e.g. 4.1 D.

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1) Crank</td>
<td>A) The flow of electric current that produces a magnetic field</td>
</tr>
<tr>
<td>4.2) Substance</td>
<td>B) A mixture of more than one metal</td>
</tr>
<tr>
<td>4.3) Fulcrum</td>
<td>C) A material that is used to carry electricity</td>
</tr>
<tr>
<td>4.4) Conductor</td>
<td>D) The space in which the magnetic field is felt</td>
</tr>
<tr>
<td>4.5) Electromagnet</td>
<td>E) Can lose magnetism when magnetic field is removed</td>
</tr>
<tr>
<td>4.6) Technology is...</td>
<td>F) The point where the lever turns</td>
</tr>
<tr>
<td>4.7) Alloy</td>
<td>G) The material something is made of</td>
</tr>
<tr>
<td>4.8) Jaws-of-life</td>
<td>H) A bar or rod attached to a pivot</td>
</tr>
<tr>
<td></td>
<td>I) Special tools to open metal parts of vehicles</td>
</tr>
<tr>
<td></td>
<td>J) Use of knowledge, skills and values and resources to meet people’s needs and wants</td>
</tr>
<tr>
<td></td>
<td>K) Ends of magnets, where force is strongest</td>
</tr>
</tbody>
</table>
QUESTION 5: IDENTIFYING STRUCTURES

Look at the images below. Name the type of structure and state whether they are man-made or natural. Write the answers next to the number. Each one is 1 mark.

5.1) 
5.2) 
5.3) 
5.4) 
5.5) 

QUESTION 6: TRUE OR FALSE

Read the following statements. Say if they are TRUE or FALSE and correct them if they are FALSE.

6.1. An internally displaced person is a person who flees from danger to another country.
6.2 Dimensioning means adding shading to a drawing.
6.3 A tennis racket is a first class lever that makes the ball travel further.
6.4 A cable which anchors a cell phone tower to the ground is called a guy.
6.5 Components are the electrical parts in a circuit.
Question 7 - Case study on an entrepreneur

Mrs Moloi is a single mother who has great difficulty in finding enough money to feed her family, let alone find the school fees to educate them. She realised that many tourists want to sample typical South African dishes but there are few outlets that cater for our own cuisine. There are many Indian curry dens, Chinese take-aways and fast food chains such as Steers and Wimpy, though.

She decided on mealie bread, samp and beans, dumplings and vetkoek. She wondered about Mopani worms and whether tourists would be sufficiently adventurous to try them. She needs the help of the class to decide on three other suggestions. She will test her product on people going to work to see if they would buy her food from a pavement stall. She plans to get permission to put tables and chairs on the pavement under an umbrella.

When Mrs Moloi told her husband of her plans, he was very excited. He suggested collecting tourists from a certain spot and driving them in his father's old donkey cart to the township to offer an authentic and unique experience to the tourists.

Once the Molois have tested their products, they will need to design a pamphlet to distribute to the Tourism Office and bed-and-breakfast establishments. Mrs Moloi also came up with a questionnaire for people to give feedback on what they thought of the meals.

7.1 What need and opportunity did Mrs Moloi identify? (2)
7.2 What research did she need to conduct before opening her business? (3)
7.3 What products would you suggest that she make to add to the menu? (3)
7.4 How do you suggest she should present the food? (2)
7.5 How did she evaluate her ability to provide alternative take-aways to those of Steers and other fast-food outlets? (2)
7.6 Write a design brief for Mrs Moloi’s business. (2)
7.7 How do you think Mrs Moloi will be able to advertise her business? (2)

[16 marks]