



Design Technology
Grade 5 – Formula Ethara – Teacher's Guide
Practical Summative Assessment – Term 1
Date: Week 12 (18th – 22nd November)

Administered during the timetabled DT lessons for each class group

Teacher Directions:

- Teachers must print out the Summative Assessment Task Sheet provided and should be evenly distributed per class group. Each student completes one paper only.
- Final mark needs to be entered onto the DT tracking sheet and copies of the tracking sheet should be given to school management. This should be completed before finalising and approving entry on the Al Manhal system.

Task Requirements:

- The paper consists of the following tasks –

Task	Marks Breakdown	Type of task	Guidance
1: Label the components.	6 Marks	Paper task	-
2: Matching	3 Marks		-
3: Draw the most / least aerodynamic shape in the box below.	2 marks		-
4: Read the descriptions and circle the Formula Ethara car that will finish first.	4 Marks		-
5: Design a logo for a team with given information.	5 Marks		-

Data entry for Abu Dhabi DT Teachers calculated as percentage: For example, a student scoring 18 out of 20 would achieve a percentage mark of: $(18 \div 20) \times 100 = 90\%$. In case of any decimal figures, it would be rounded to the nearest whole number e.g. 83.33% to 83%.



Grade 5 – Formula Ethara

Student Name –

Grade -

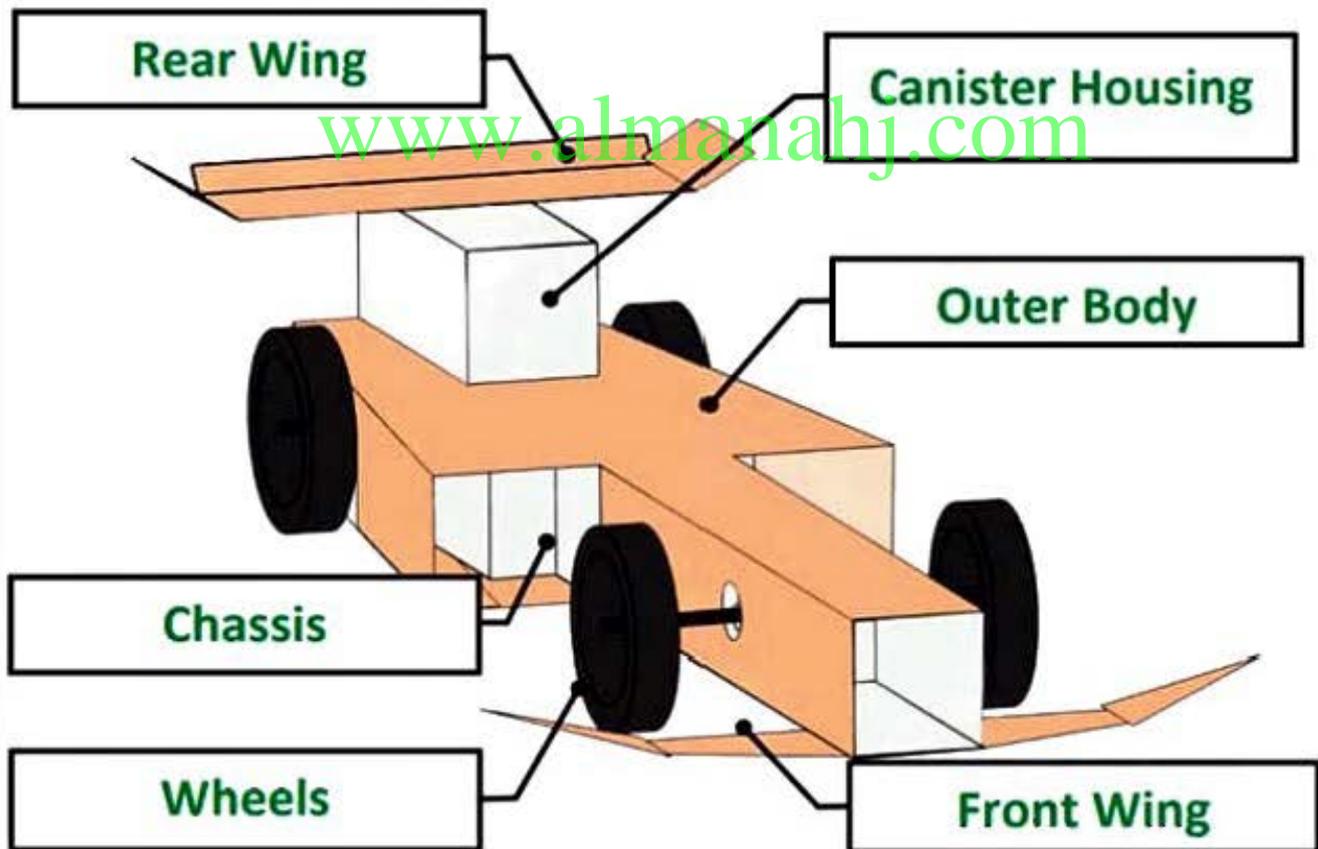
Student ID No. -

Task 1:

6 marks

Label the following components of the car in the diagram below:

Wheels	Rear Wing	Canister Housing	Chassis	Outer Body	Front Wing
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1 mark for each correct answer



Task 2:

3 marks

Draw a line to match the team role on the left to the correct responsibility on the right.



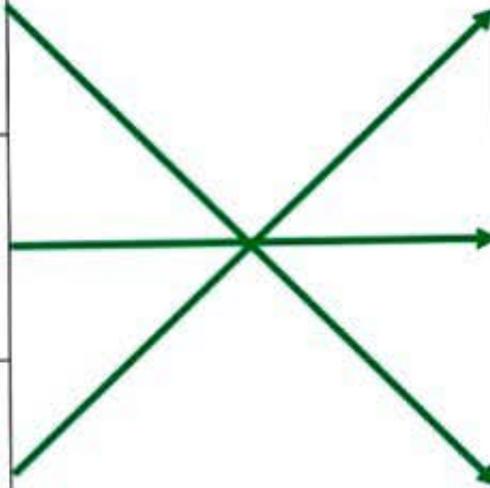
Team Manager



Design Engineer



Graphic Designer



Makes sure the car is built correctly

Makes sure the car looks good

Makes sure the car is built on time

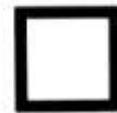
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1 mark for each correct answer

Task 3:

2 marks

Which shape is the most aerodynamic shape? Which shape is the least aerodynamic shape? Draw your answer in the box below.



3.1 The most aerodynamic shape is:



3.2 The least aerodynamic shape is:



1 mark for each correct answer



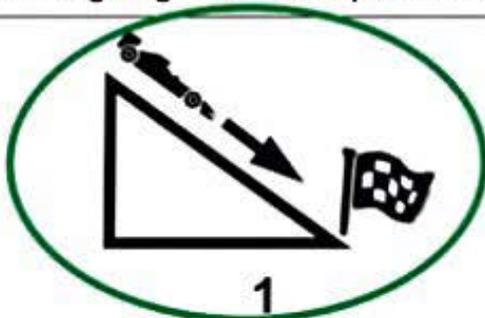
Task 4:

4 marks

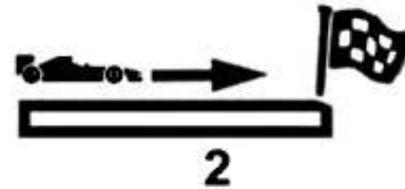
Read the descriptions and circle the Formula 1 car that will finish first.

4.1

Car 1 is going down a slope while Car 2 is on a flat surface.



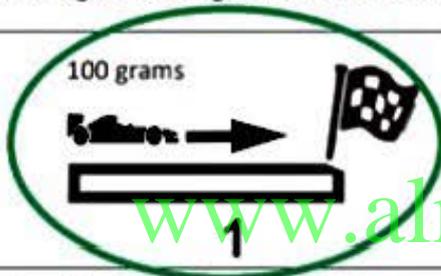
1



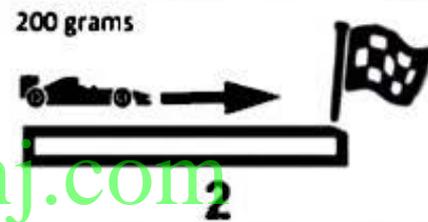
2

4.2

Car 1 weighs 100 grams and Car 2 weighs 200 grams.



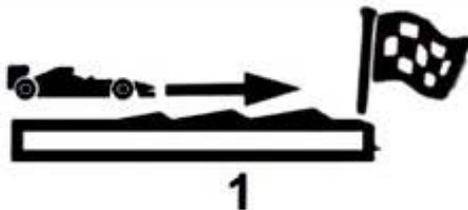
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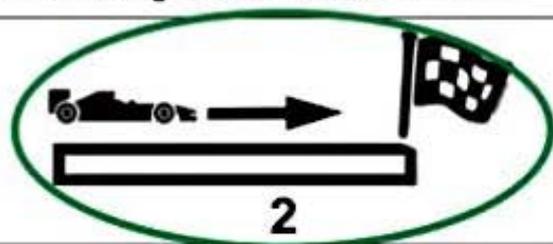
2

4.3

Car 1 is driving on a rough surface and Car 2 is driving on a smooth surface.



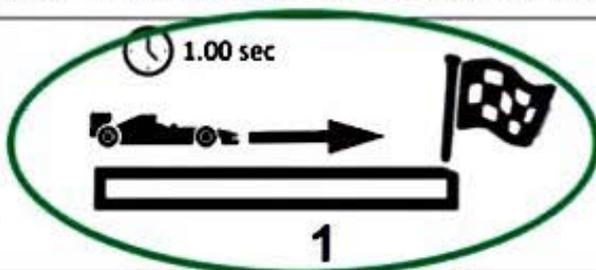
1



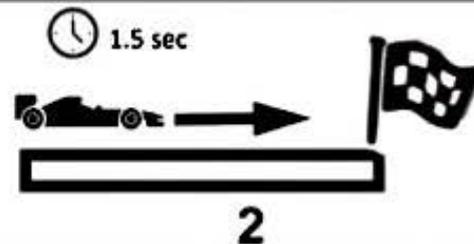
2

4.4

Car 1 has a 1 second reaction time and Car 2 has a 1.5 second reaction time.



1



2

1 mark for each correct answer



Task 5:

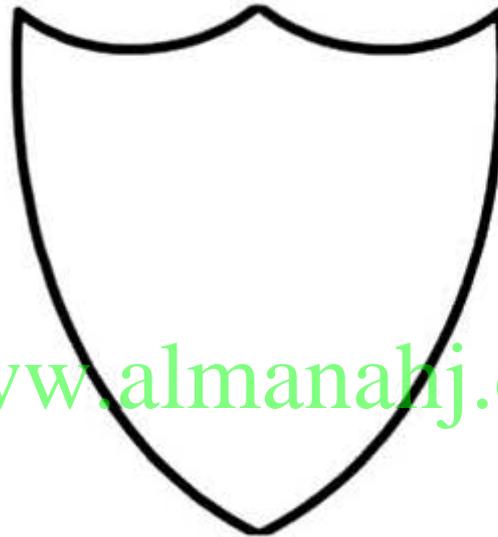
5 marks

Read the following branding information for a Formula Ethara team:

Name: Team Zebra

Colour Theme: Black and White

Using this information, design a logo for this team. Part of it has been done for you.



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- This task must be completed on paper.
- Students can use pencils / ruler, etc.
- The logo should have the name – 1 mark.
- The logo should use the colour theme given – 1 mark.
- The logo design created should be relevant to the branding information given – 2 marks.
- The logo must be an eye-catching design – 1 mark.

Task 1	Task 2	Task 3	Task 4	Task 5
/ 6	/ 3	/ 2	/ 4	/ 5
Summative Assessment Total				/ 20