|  |  |
| --- | --- |
| **SUBJECT: MATHEMATICS GRADE 8** |  |
| **PROJECT** | |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

School: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**INSTRUCTIONS TO LEARNERS:**

1. Work in pairs.
2. Make neat drawings.
3. Show all your working on the spaces provided.

**AIM**: This project is designed to assess your knowledge on 2D and 3D shapes (perimeter, area, volume and surface area)

**MATERIALS:**

* Set of mathematical instructions
* Ruler (30cm)
* Pen and pencil
* Provided A4 plain paper

**Area and Perimeter**

**Question 1**

1. Determine the area and perimeter of the three shapes. Use the given formulae for the calculations.



**Area =**

**Area =**

**Area =**

**where**

1.1

1.2

1.3

1.1 Area =

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (3)

1.2 Area = where Perimeter = 2

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (6)

1.3 Area = Perimeter =

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (6)

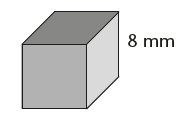
1.4 Name the shape that has the biggest area. (2)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Volume and Surface Area**

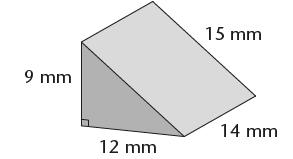
1. Determine the volume and surface area of the following 3D shapes.

2.1



Volume = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Surface area \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (6)

2.2



Volume \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Surface area \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (7)

**MEMORANDUM**

|  |  |  |
| --- | --- | --- |
| QUESTION 1 | * 1. Triangle has the biggest area. | (3)  (3)  (3)  (3)  (3)  (2) |
| QUESTION 2 |  | (3)  (3)  (3)  (4) |
|  | **TOTAL** | **(30)** |