



**DATE: TERM 3 2021**

**NAME OF LEARNER: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ GRADE 9: \_\_\_**

**TOTAL : 50**

**SECTION A**

**THIS IS A TEACHER GUIDED SECTION**

1. What do the following terms mean:
   1. parallel lines

These are lines that are equidistant apart.

They never intersect or touch one another.✓ (1)

* 1. perpendicular lines

Lines that intersect at 900 ✓ (1)

* 1. complementary angles

A pair of angles are said to be complementary if their sum is 90 degrees. ✓ (1)

* 1. supplementary angles

A pair of angles are said to be supplementary if their sum is 180 degrees ✓ (1)

1.5 vertically opposite angles

When two straight lines intersect , the angles opposite each other are vertically opposite angles. Vertically opposite angles are equal. ✓ (1)

1. Study each diagram and then use geometric terms to describe what is shown.

Graphical user interface, application, table

Description automatically generatedparallel lines✓ , parallel lines✓ , point✓ , perpendicular lines✓, perpendicular lines✓ (5)

1. Use a protractor to measure the size of each of the angles in the diagram below and then indicate the size and name of the angle in the table provided.

A screenshot of a computer

Description automatically generated with medium confidence

| Name of angle | Measure of angle size | Type of angle |
| --- | --- | --- |
|  | 90o✓ | Right angle✓ |
|  | Check angle size correct to 2 degrees✓ | Obtuse angle✓ |
|  | Check angle size correct to 2 degrees✓ | Acute angle✓ |
|  | Check angle size correct to 2 degrees✓ | Reflex angle✓ |
|  | Check angle size correct to 2 degrees✓ | Acute angle✓ |

(10)

**Total 20**

**SECTION B**

DIAGRAM ONE

The diagram below is a quadrilateral.

Graphical user interface

Description automatically generated

Identify the type of quadrilateral represented in the diagram.

| Trapezium✓ (1) |
| --- |

Use the diagram to provide 3 properties of the quadrilateral identified

| * the sum of all the four interior angles of the trapezium is equal to 360° * A trapezium has two parallel sides and two non-parallel sides. * The diagonals of regular trapezium bisect each other. * No lines of symmetry   ✓✓✓Any 3 |
| --- |

DIAGRAM TWO

The diagram below is a quadrilateral.

Graphical user interface

Description automatically generated

Identify the type of quadrilateral represented in the diagram.

| Kite ✓ (1) |
| --- |

Use the diagram to provide 3 properties of the quadrilateral identified

| * Two pairs of adjacent sides equal in length * One pair of opposite angles equal to each other where the short side meets the longer side * One line of symmetry * The long diagonal bisect the short diagonal perpendicularly * The diagonals bisect the interior opposite corner angles only where the adjacent sides meet   ✓✓✓Any 3 |
| --- |

DIAGRAM THREE

The diagram below is a quadrilateral.

Graphical user interface

Description automatically generated

Identify the type of quadrilateral represented in the diagram.

| Rhombus ✓ (1) |
| --- |

Use the diagram to provide 3 properties of the quadrilateral identified

| * Both pairs of opposite sides parallel * All sides equal in length * Both pairs of opposite interior angles equal in size * Two lines of symmetry * The diagonals bisect each other perpendicularly * The diagonals bisect the interior opposite corner angles   ✓✓✓Any 3 |
| --- |

DIAGRAM FOUR

The diagram below is a quadrilateral.

Graphical user interface

Description automatically generated

Identify the type of quadrilateral represented in the diagram.

| Rectangle✓ (1) |
| --- |

Use the diagram to provide 3 properties of the quadrilateral identified

| * Both pairs of opposite sides parallel * Both pairs of opposite sides equal in length * All interior angles equal to 90° * Two lines of symmetry * The diagonals bisect each other and is equal in length   ✓✓✓Any 3 |
| --- |

DIAGRAM FIVE

The diagram below is a quadrilateral.

Graphical user interface, application

Description automatically generated

Identify the type of quadrilateral represented in the diagram.

| Parallelogram✓ (1) |
| --- |

Use the diagram to provide 3 properties of the quadrilateral identified

| * Both pairs of opposite sides parallel * Both pairs of opposite sides equal in length * Both pairs of opposite interior angles equal in size * No lines of symmetry * The diagonals bisect each other * The diagonals are not equal in length   ✓✓✓Any 3 |
| --- |

**Total 20**

| **MARK ALLOCATION** | **QUESTION CRITERIA (SECTION C)** | | | |
| --- | --- | --- | --- | --- |
| **Appearance**  **(2)** | **Drawing the Streets**  **(3)** | **Buildings**  **(3)** | **Park and additions**  **(2)** |
| **0** | Not done. | Not done. | Not done. | Not done. |
| **1** | Lines and points are not clear and buildings are incorrectly constructed and untidy , there is no organisation , the images and additions are not coloured or decorated. | Either the parallel lines or perpendicular lines are not drawn as streets . Traffic lights or stop signs are not drawn in the correct positions. No streets are named. | Not all buildings are correctly positioned as per indicated relationship. Building names have not been included. 2d shapes were incorrectly drawn to represent buildings. | Park has been included but the location is incorrect. The following are not included :  The sandbox  The picnic area  Less than 3 additional items were included on the poster. |
| **2** | The correct page size is used (A3). The buildings are correctly constructed and coloured, work is neat , well organized , lines and points are clear and all images and additions are coloured or decorated. | Less than three parallel lines and only one perpendicular line is correctly drawn as streets. Traffic lights or stop signs are drawn at less than 2 t intersections. Some streets are named. | All 6 buildings are correctly positioned as indicated. Some buildings have been named. Less than 3 different types of 2 d shapes were used to construct the buildings. | Park included in the correct location on the poster.  The sandbox has been drawn.  The picnic area has been drawn with the correct triangle.  5 additional items were included on the poster. |
| **3** |  | Three or more parallel lines are correctly drawn as streets, two or more perpendicular are correctly drawn as streets. Traffic lights or stop signs are drawn at 2 different intersections. All streets are named. | All 6 buildings are correctly positioned as per relationship. Building names have been named and neatly included on or near the buildings. The buildings were constructed using the 4 or more different 2d shapes. |  |
| **LEARNERS’ MARK** |  |  |  |  |