**Task One**

* Complete each of the eight quadrilaterals using their diagonals
* Label each quadrilateral with its name

1. Which quadrilaterals have two pairs of **parallel** sides?
2. Which quadrilaterals have diagonals that are **perpendicular**?
3. Which quadrilaterals have diagonals that **bisect** each other?

**Task Two**: Work out how these words can be placed in the Venn diagram

|  |  |  |  |
| --- | --- | --- | --- |
| **Quadrilateral** | **Parallelogram** | **Square** | **Polygon** |
| **Isosceles trapezium** | **Arrowhead** | **Rhombus** | **Right-angled trapezium** |
| **Trapezium** | **Oblong** | **Kite** | **Rectangle** |

**Task Three**

Use your completed quadrilaterals to help complete this table of information. Some facts have been written in to help you.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Arrowhead or delta** | **Kite** | **Isosceles trapezium** | **Trapezium** | **Parallelogram** | **Rhombus** | **Rectangle** | **Square** | **Name** |
|  |  |  |  | 2 pairs |  |  |  | **Equal sides?** |
|  |  |  |  |  |  |  | All angles equal | **Equal angles?** |
|  |  |  |  |  |  | Only if square |  | **Perpendicular diagonals?** |
|  |  |  |  |  | Yes |  |  | **Diagonals bisect each other?** |
|  |  | 1 line of symmetry |  |  |  |  |  | **Line symmetry?** |
|  |  |  |  |  |  | Order 2 unless square |  | **Rotational symmetry?** |
|  |  |  |  |  | ‘A pushed over square’ |  |  | **Something else** |