Name: Teacher: Class:

**9.2 Visualising and constructing**

|  |  |  |
| --- | --- | --- |
| **You need to learn to:** | **Pre-learning assessment** | **Post-learning assessment** |
| 1. Use ruler and compasses to construct the perpendicular bisector of a line segment | *1,2,3* | *1,2,3* |
| 1. Use ruler and compasses to bisect an angle | *1,2,3* | *1,2,3* |
| 1. Use a ruler and compasses to construct a perpendicular to a line from a point (at a point) | *1,2,3* | *1,2,3* |
| 1. Understand the meaning of locus (loci) | *1,2,3* | *1,2,3* |
| 1. Know how to construct the locus of points a fixed distance from a point (from a line) | *1,2,3* | *1,2,3* |
| 1. Identify when to use the locus of points a fixed distance from a point (from a line) | *1,2,3* | *1,2,3* |
| 1. Identify when a perpendicular bisector is needed to solve a loci problem | *1,2,3* | *1,2,3* |
| 1. Identify when an angle bisector is needed to solve a loci problem | *1,2,3* | *1,2,3* |
| 1. Choose techniques to construct 2D shapes; e.g. rhombus | *1,2,3* | *1,2,3* |
| 1. Construct a shape from its plans and elevations |  |  |
| 1. Construct the plan and elevations of a given shape |  |  |

**Assessments**

|  |  |  |
| --- | --- | --- |
| Assessment | What score **I think** I’ll get out of 40  (complete **before** assessment) | What score **I did** get out of 40  (complete **after** assessment) |
| Diagnosis assessment | /11 = % | /11 = % |
| Test assessment | /11 = % | /11 = % |

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**9.2 Visualising and constructing** Date:

**Diagnosis (to be taken before the topic is taught)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q)** | **Question** | **Workings and answer** | Macintosh HD:private:var:folders:65:l364j7q962v4_xf3302b347w0000gn:T:TemporaryItems:imgres.jpg |
| 1) | Use a ruler and compass to construct the perpendicular bisector of the line. |  | (1) |
| 2) | Use a ruler and compass to bisect the angle. |  | (1) |
| 3) | Use a ruler and compasses to construct a perpendicular to the line AB from C | B  A  C | (1) |
| 4) | Describe what ‘locus’ means. |  | (1) |
| 5) | Construct the locus of points that are 1cm from the line DE | E  D | (1) |
| 6) | In which of these situations would constructing the locus of points a fixed distance from a point be useful? | 1. Finding the exact centrepoint between two towns on a map. 2. Show on a diagram where a farmer needs to dig a straight trench that is equidistant from two adjacent hedges. 3. Showing the area on a map covered by a radio transmitter. | (1) |
| 7) | In which of these situations would constructing a perpendicular bisector be useful? | 1. Finding the exact centrepoint between two towns on a map. 2. Show on a diagram where a farmer needs to dig a straight trench that is equidistant from two adjacent hedges. 3. Showing the area on a map covered by a radio transmitter. | (1) |
| 8) | In which of these situations would constructing an angle bisector be useful? | 1. Finding the exact centrepoint between two towns on a map. 2. Show on a diagram where a farmer needs to dig a straight trench that is equidistant from two adjacent hedges. 3. Showing the area on a map covered by a radio transmitter. | (1) |
| 9) | Use a ruler, compass and pencil to construct a Rhombus |  | (1) |
| 10) | |  |  | | --- | --- | | P  S  F | **Front** | | **Side** | **Plan** | | | (1) |
| 11) | |  |  | | --- | --- | |  | **Front** | | **Side** | **Plan** | | | (1) |

**9.2 Visualising and constructing** Date:

**Test (to be taken after the topic is taught)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Q)** | **Question** | **Workings and answer** | Macintosh HD:private:var:folders:65:l364j7q962v4_xf3302b347w0000gn:T:TemporaryItems:imgres.jpg |
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| 8) | In which of these situations would constructing an angle bisector be useful? | 1. Finding the exact centrepoint between two towns on a map. 2. Show on a diagram where a farmer needs to dig a straight trench that is equidistant from two adjacent hedges. 3. Showing the area on a map covered by a radio transmitter. | (1) |
| 9) | Use a ruler, compass and pencil to construct a Hexagon |  | (1) |
| 10) | |  |  | | --- | --- | | P  F  S | **Front** | | **Side** | **Plan** | | | (1) |
| 11) |  | | (1) |