Name: Teacher: Class:

**6.3 Pattern Sniffing**

|  |  |  |
| --- | --- | --- |
| **You need to learn to:** | **Pre-learning assessment** | **Post-learning assessment** |
| 1. Use the vocabulary of a sequence | *1,2,3* | *1,2,3* |
| 2. Recognise a linear sequence | *1,2,3* | *1,2,3* |
| 3. Describe a number sequence | *1,2,3* | *1,2,3* |
| 4. Find the next term in a linear sequence | *1,2,3* | *1,2,3* |
| 5. Find a missing term in a linear sequence | *1,2,3* | *1,2,3* |
| 6. Generate a linear sequence from its description | *1,2,3* | *1,2,3* |

**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 | /25 = % | /25 = % |
| Test assessment | /25 = % | /25 = % |

Name: Teacher: Class:

**6.3 Pattern Sniffing**

|  |  |  |
| --- | --- | --- |
| **You need to learn to:** | **Pre-learning assessment** | **Post-learning assessment** |
| 1. Use the vocabulary of a sequence | *1,2,3* | *1,2,3* |
| 2. Recognise a linear sequence | *1,2,3* | *1,2,3* |
| 3. Describe a number sequence | *1,2,3* | *1,2,3* |
| 4. Find the next term in a linear sequence | *1,2,3* | *1,2,3* |
| 5. Find a missing term in a linear sequence | *1,2,3* | *1,2,3* |
| 6. Generate a linear sequence from its description | *1,2,3* | *1,2,3* |

**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 | /25 = % | /25 = % |
| Test assessment | /25 = % | /25 = % |

**6.3 Pattern Sniffing** Date:

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Question n.o.** | **Question** | **Workings and answer** | Macintosh HD:private:var:folders:65:l364j7q962v4_xf3302b347w0000gn:T:TemporaryItems:imgres.jpg |
| 1 | Write a definition for the following:-   1. Sequence 2. Linear sequence 3. Term 4. Term to term rule |  | (4) |
| 2 | Which of the following are linear sequences?   1. 1, 4, 9, 16, … 2. 13, 17, 21, 25, … 3. 22, 19, 16, 13, … 4. 1, 1, 2, 3, 5, ….. 5. 0.7, 0.9, 1.1, 1.3, … 6. 5, 9, 14, 20, 27, … 7. 6, 3, 6, 3, 6, 3, … 8. -7, -5, -3, -1, … |  | (4) |
| 3 | Describe the rule for each sequence   1. 35, 39, 43, 47, … 2. 59, 56, 53, 50, … 3. -8, -6, -2, 0, ….. 4. 0.25, 0.5, 0.75, 1, …. |  | (4) |
| 4 | Write the next term for each sequence   1. 35, 39, 43, 47, … 2. 59, 56, 53, 50, … 3. -8, -6, -4, -2, ….. 4. 0.25, 0.5, 0.75, 1, …. |  | (4) |
| 5 | Find the missing numbers from the following sequences.   1. 3, ⊡, 11, 15, … 2. 27, ⊡, 37, 42, … 3. 8, ⊡, ⊡, 20, … 4. ⊡, 10, ⊡, 4, … 5. ⊡, ⊡, 6, 6.5 6. ⊡, 28, 36, ⊡ |  | (6) |
| 6 | Write the first 4 terms of the following sequences.  a) The first term is 7, the term to term rule is add 9  b) The sequence decreases by 6 each time, the first term is 36  c) A linear sequence increases by 0.5 from term to term. The first term is 9. |  | (3) |

**6.3 Pattern Sniffing** Date:

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Question n.o.** | **Question** | **Workings and answer** | Macintosh HD:private:var:folders:65:l364j7q962v4_xf3302b347w0000gn:T:TemporaryItems:imgres.jpg |
| 1 | Write a definition for the following:-   1. Sequence 2. Linear sequence 3. Term 4. Term to term rule |  | (4) |
| 2 | Which of the following are linear sequences?   1. 1, 3, 6, 10, … 2. 23, 27, 31, 35, … 3. 5, 2, -1, -4, … 4. 10, 10, 20, 30, 50, ….. 5. 2.2, 2.5, 2.8, 3.1, … 6. 15, 19, 24, 30, 37, … 7. 0, 4, 0, 3, 0, 2, … 8. -11, -15, -19, -23, … |  | (4) |
| 3 | Describe the rule for each sequence   1. 22, 27, 32, 37, … 2. 29, 25, 21, 17, … 3. -10, -6, -2, 2, ….. 4. 5.25, 5.5, 5.75, 6, …. |  | (4) |
| 4 | Write the next term for each sequence   1. 22, 27, 32, 37, … 2. 29, 25, 21, 17, … 3. -10, -6, -2, 2, ….. 4. 5.25, 5.5, 5.75, 6, …. |  | (4) |
| 5 | Find the missing numbers from the following sequences.   1. 14, ⊡, 24, 29, … 2. 34, ⊡, 26, 22, … 3. 17, ⊡, ⊡, 26, … 4. ⊡, 2, ⊡, 10, … 5. ⊡, ⊡, 10.5, 11 6. ⊡, 104, 110, ⊡ |  | (6) |
| 6 | Write the first 4 terms of the following sequences.  a) The first term is 12, the term to term rule is add 5  b) The sequence decreases by 3 each time, the first term is 15  c) A linear sequence increases by 0.5 from term to term. The first term is 7. |  | (3) |