

Number Patterns

Literacy Level 26 • Maths Level 3 • Number and Algebra

Wise Up!



Inquiry Learning
for Years 5 and 6

Inquire to Learn!

+ - × ÷ + - × ÷ + - × ÷ + - × ÷



There are many ways in which *Number Patterns* can be used as a base for Inquiry Learning. This is just one suggestion. You could also take advantage of the links to art and poetry, and career choices.

Literacy Achievement Objective:

Use context to understand abstract ideas and figurative language.

Specific Literacy Learning Outcomes

Recognize number patterns in literary forms such as sonnets and haiku.

Use number patterns to create haiku.

Numeracy Achievement Objective:

Describe number patterns. Predict further members of sequential patterns.

Specific Numeracy Learning Outcome:

Identify rule for number patterns to solve specific problems.

Additional Achievement Objective –

Maths: Statistics

Conduct investigations using the statistical inquiry cycle. (Level 3)

Specific Maths Outcome:

Students learn how to gather information and display it to identify patterns.

Session 1: Using the Big Book, share-read *Number Patterns*, stopping at natural points for discussion. Draw on the students' prior knowledge of number patterns.

Session 2: Using the Big Book, work through the Literacy Focus questions. Guide the students towards achieving the Specific Literacy Learning Outcomes.

Literacy Focus:

1. *Recall:* Ask: What is the number pattern used in a haiku? [5 syllables, 7 syllables, 5 syllables (page 6)]
2. *Inference:* Ask: Why do you think number patterns are used in poems and music? [Answers may vary, but could include helping with rhythm.]
3. *Review:* Review the use of number patterns in poetry, music, and art.

Session 3: Using the Small Books, have the students reread *Number Patterns*. Model answering the Wise Up! on page 3. In their maths groups, have the students answer the Wise Up! questions on pages 5, 13, 15, 19, 21, and 23. Help individual groups as necessary.

Session 4: As a class, have the students complete the challenge on page 16. Then divide the class into small groups to complete the challenges on pages 6 and 24.

Inquiry Learning Extension:

1. Have the students work in small groups to take a survey on a topic relating to the text – such as hours spent listening to the radio or watching television. The students can then graph the results of their survey.
2. Prepare and photocopy a worksheet with one or more 10×10 grids, numbered 1 to 10 on line 1, 11 to 20 on line 2, and so on. (Or students can make their own.) Have the students create their own number patterns by colouring in certain squares – e.g. multiples of 3.