

DIVISION IV (Grades 6-7)

MONTH BY MONTH INSTRUCTIONAL SEQUENCE FOR THE MATHEMATICS PENTATHLON® GAMES

(Linking the Games With Adventures in Problem Solving Book II
and Investigation Exercises Book II)

SEPTEMBER

- **PRIME GOLD**
Adventures: Activity V (Factors, Patterns, and Rectangles - pp.142-144)
Investigations: pp. 6-7
Game: Shade in all prime numbers on smaller gameboard in game manual.
- **PENT 'EM IN**
Adventures: Activity II Juggle, Constructing Pentominoes - pp. 10-12)
Adventures: Activities II, III, and IV (pp. 69-75)
- **FRAC FACT**
Adventures: Activities V-XI (Fab-A-Diffy chapter on equivalence and addition - pp. 168-172)
- **REMAINDER ISLANDS**
Game: Teach rules and practice.

OCTOBER

- **PRIME GOLD**
Game: Teach rules without Goldbach's Conjecture and chip removal rules.
- **PENT 'EM IN**
Investigations: pp. 3-8 (Allow students to explore movements with pentominoes.)
- **FRAC FACT**
Adventures: Activities I and II (subtraction and Capture the Difference - pp. 175-177)
- **REMAINDER ISLANDS**
Adventures: Activity IV (Remainder Islands Worksheets - pp. 112-114)
- **FRACTION PINBALL**
Adventures: Activity II (Fraction Pinball Sum Search - pp. 187-188)

NOVEMBER

- **PRIME GOLD**
Game: Teach Goldbach's Conjecture rule.
Adventures: Activity VI (Factor Matrices - pp. 144-150) - if time permits
- **PENT 'EM IN**
Game: Teach rules and practice.
- **FRAC FACT**
Game: Teach rules and practice using only addition and subtraction.
- **FRACTION PINBALL**
Adventures: Activity III (Fraction Pinball Worksheets - pp. 187, 189-190)

DECEMBER

- **PRIME GOLD**
Game: Teach "Shaft" Chip Removal rules.

Investigations: pp. 3-5

Adventures: Activity IX (Prime Gold Worksheets - pp. 153, 156-158)

- PENT 'EM IN

Investigations: pp. 9-12

- FRAC FACT

Investigations: pp. 3-9

Adventures: Activities VI and VII (multiplication and division - pp. 181-183, 224)

- FRACTION PINBALL

Adventures: Activity IV (Fraction Pinball Wizard - pp. 191, 193-195)

- REMAINDER ISLANDS

Adventures: Activity V (Estimate & Calculate - p. 112)

- Continue to practice Remainder Islands and Pent 'em In.

JANUARY

- PRIME GOLD

Game: Teach "Diagonal Prime Veins" Chip Removal rules.

Investigations: pp. 8-12

- PENT "EM IN

Investigations: pp. 13-14 - if time permits

- FRAC FACT

Game: using all four basic operations and tournament rules

Investigations: pp. 10-17

- REMAINDER ISLANDS

Investigations: pp. 3-10

- FRACTION PINBALL

Game: Teach rules and practice.

- Continue to practice all 5 games.

FEBRUARY

- PRIME GOLD

Investigations: pp. 13-21

Game: Teach tournament rules.

- Teach tournament rules to PENT 'EM IN.

- FRACTION PINBALL

Investigations: pp. 3-6

- Continue to practice REMAINDER ISLANDS and FRAC FACT.

MARCH AND APRIL

- Teach tournament rules to REMAINDER ISLANDS, FRAC FACT, and FRACTION PINBALL.

- Continue to practice all 5 games using tournament rules.

IF TIME PERMITS: Encourage students to write the tournament rules in their own words.

IF TIME PERMITS:

Refer to Adventures in Problem Solving Book II and Investigation Exercises Book II for many other additional activities that will enrich students' mathematical problem-solving skills.