Thinking with Mathematical Models -- Unit Planning Overview

Investigations & Assessments	Days	Materials for Students	Materials for Teachers	ACE Questions	Miscellaneous
1. Linear Models *Read TE p. 25 a-n*	6	Grid paper 11"x4" strips of paper (15/group) Small paper cup Pennies (50 per group) Transparent grids (optional) Blank transparencies (optional) Chalk or Masking tape (optional) Labsheet 1.2 (1/student) Graphing calculators	Transparencies of 1.1-1.5B Transparency of Labsheet 1.2	1.1: #29-31 1.2: #25, 28 1.3: #1, 4-8, 26, 40, 41 1.4: #92, 3, 24, 27, 39 15: #9-23, 32-38	
Check -Up	1	Copies of p. 63-64			Answers on p. 74
2 Nonlinear Models *Read TE p. 36 a-i*	4	Grid paper 4" strips of paper cut to lengths of 4"x11" Small paper cups Pennies (50/group) Weights such as washers or pennies Fulcrums Metersticks Graphing Calculators	Transparencies of 2.1A-2.3	2.1: #8, 9 2.2: #3-7 2.3: #1, 2, 10-12	
Quiz	1	Copies of p. 65-66			Answers on p.74-76
3 More Nonlinear Models *Read TE p. 46 a-i*	3	Grid paper Blank transparencies or large sheets of paper (otpional) Copies of Labsheet 3, ACE (1/student)	Transparencies of 3.1-3.2 Eight identical drinking glasses, water, food coloring (optional) Sticky notes or masking tape	3.1: #1, 3, 5 3.2: #2, 4, 6, 7	
4. A World of Patterns *Read TE p. 59 a-l*	4	Graphing calculators	Transparencies of 4.1-4.3	4.1: #1-4, 6-8 4.2: #5, 9 4.3: #2, 4, 6, 7	
Self Assessment	Take Home	Copies of p. 73			
Unit Test	1	Copies of p.69-71 or 86-88			Answers on p.78-81