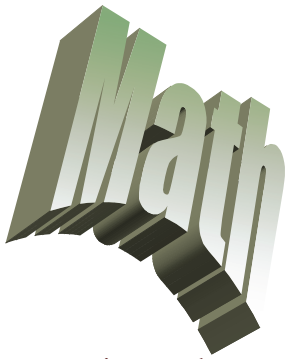
Algebra/Geometry Institute Summer 2005

Prime and Composite Numbers



Faculty Name: Shelia Taylor
School: Melissa Manning Elementary
Grade Level: 6th

1 Teaching objective(s) The students will distinguish between prime and composite numbers.

2 Instructional Activities

The teacher will tap into the students prior knowledge by making the statement "what type number has only two factors." The teacher will also state that the factors are 1 and that number. (Prime Numbers) The teacher will then give some examples of prime numbers.

Examples: 3 = 1 x 3
5 = 1 x 5
7 = 1 x 7
11 = 1 x 11

The teacher will then ask "What is a number called when it has more than two factors?" The expected answer would be Composite Numbers. The teacher will then call for volunteers to give an example of a composite number and the factors of that number. The teacher will then give an example of some composite numbers and their factors.

Examples:	**Number**	**Factors**
	9	**1, 3, 9**
	15	**1, 3, 5, 15**
	39	**1, 3, 13, 39**
	22	**1, 2, 11, 22**

After making sure that everyone understands the concept of the lesson, the teacher will then test the students' knowledge through a flash card game.

(Game Directions): 1. The teacher will hold up a card with a specific number.
2. The student will raise his/her hand to be recognized.
3. Once the student has been recognized he/she will tell whether the

number called is a prime or a composite number. The student will then clarify his or her answer by listing the factors for that specific number.

4. The teacher will model the game before the students actually play.
5. The teacher will instruct the student that the first time the game is played it will be at random.
6. The teacher will then instruct the students that once we've done a few of the numbers we will divide into two groups and compete one group against the other.

In conclusion of the game the students will be given a number chart with the numbers 1 - 50, they will have to mark an X on the prime numbers and place a red dot on the composite numbers.

3 Materials and Resources: McGraw Hill, 2002 McGraw Hill School Division, pages 166-167, and handouts.

4 Assessment : Teacher Observation, student participation, evaluation of 50 number chart.

Flash Cards

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Directions: 1. Tell whether each number is a Prime Number or a Composite Number.
2. For each composite number list the factors.