**Math modeling unit and activity** - example layout of description

Activity name: \_\_\_*Counting in different bases*\_\_\_\_\_

Big Idea(s)/ Concept(s)/major math area(s): \_\_*The base determines the place* \_\_\_\_\_\_\_

Grade level(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Math (and science?) Standards included:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Procedure overview/ teacher directions** ........................

**Lesson details**, expected timing, including:

Pre and post activities (student preconceptions, pre-knowledge etc);

teacher introduction to activity; guidance to students; math vocabulary

pre-discussion (usually whole group)

The lesson may consist of one or more sequential activities leading to and using the “big idea” of the lesson.

**Part 1** Initial whole group discussion - setting the scene

**Part 2** Student group activity/pre-activity (with/without whiteboard)

Whole group discussion of part 1 activity - conclusions to be drawn from discussions about activity - these may be only qualitative or just introducing the “big ideas” - being developed by the students, with teacher guidance.

**Part 3** Student group activity (with/without whiteboard)

Whole group discussion of part 1 activity - usually a quantitative proof of the “big idea(s); conclusions to be drawn from discussions.

These become mathematically quantitative - verified by the student-acquired data.

**Part 4** Student group follow-up activity......etc - there might be several of these, as the topic is extended in the unit....

**Part 5 Final discussion** (with/without whiteboard)

Generalizations, connections to other math topics, connections to real life

**Brief summary** of how this unit fits into year’s **curriculum and storyline** (e.g preceding and post activity/units) [This could go at the beginning of the description].