

## **The Ten-Thousand Chart**

A 2<sup>nd</sup>-6<sup>th</sup> grade Lesson  
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### **The Mathematics:**

There are patterns to the way numbers are formed.  
Sets of one hundred can be perceived as a single entity. (unitizing)

**The task:** Students will name the number indicated on the 10,000 chart using patterns and without counting.

**Materials:** Hundreds chart, blank hundreds chart, blank 10,000 chart (I made my own by taping together 100 hundreds chart. See picture below.)

### **The Lesson:**

#### **Before the task** (introducing)

##### 1. Hundreds Chart review

- Show hundreds chart and ask, **“What patterns do you see?”** This is a good time to use revoicing (**“So you’re saying...”**) and repeating (**“Can you repeat what he just said in your own words?”**).
- Show blank hundreds chart. Point to a spot and have students explain what number goes in that spot and how they got their answer.

2. Introduce 10,000 chart. Explain that they will work in groups to name the numbers that would be in the squares indicated by the blue dots. They may not count or come up to the chart. On a piece of paper they should answer the following questions:

What did you do to get the answer?

Why did you do it that way?

Why do you think your solution is correct?

#### **During the task** (tiered questioning)

Novice -

Point to places on the first row that would help them figure out what numbers go on the first row.

Average -

**“Can you tell me what you are doing?”**

**“Why do you think that might be right?”**

Advanced -

**“Can you write a rule or method for finding any number on the chart?”**

Turn the chart 180°. **“Now what number is the blue dot?”**

#### **After the task** (summarizing)

Set 1: Group presentations

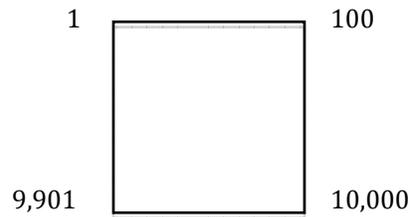
Audience can interact by responding with “I don’t understand ...” or “I agree or disagree because...”

Step 2: Ask, "What made this task hard?" "What made this task easy?"

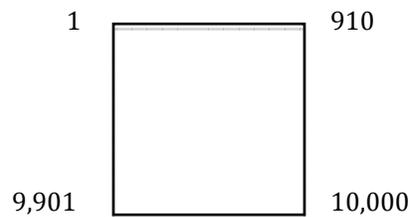
**Notes:**

◆ There are two interpretations:

1. Each row is 100. The corners would be:



2. Each box is a hundreds chart. The corners would be:



◆ The chart can be easily adapted as a fraction chart or a decimal chart. Each box would be 0.01 or 1/100 and it would go from 0.01 to 100.00.

