

# Activity 12

## Recycle State Test Data

**Objective:** Teachers will be able to utilize state test data as a real-world example for data analysis in a statistics class.

**Introduction:** State testing, No Child Left Behind, standards, anchors and Adequate Yearly Progress are terms all teachers in every state have become very familiar with. Data from the state exams are reported to school districts but most teachers do not know how to utilize or understand the data. The following activity will demonstrate how to extract the data to be used by students in the various activities that follow Activity 1.

The concept is simple, each student or group of students will be assigned a class in the district. At the end of the statistics course, each student will be able to give a written report to the teacher of their assigned class that will explain the meaning of the data and how this data can be used to adjust their curriculum to help their students improve on the next test.

Confidentiality is the most important detail of this project. Your students must not know the identity of the teacher of their assigned class, the grade level of their assigned class or the names of the students. Therefore, you will need to design your own way of identifying who receives the final report.

### **STEPS TO PREPARE DATA:**

1. Normally, state testing data is distributed to school districts with a code to access the data to protect the students' right to confidentiality. The first step is to get the code from your superintendent. This step is usually easy if you explain that confidentiality will be kept. Many administrators will be very happy to have you do this project because most administrators don't know how to interpret the data and put the data in the hands of the teachers.
2. When the data is downloaded on your computer, copy the data to a new spreadsheet. Delete all columns that you do not need. Keep it

simple! Some states report the data by standards, some by anchors, some by national standards or anchors and some by state standards or anchors. The only columns that you should keep are the students' last name, first name, grade, and standards or anchors. Save a copy. Once you have these columns, delete all students that are not in the class you are setting up. Keep going back to your copy until all your sample classes are set up.

3. Once you have all the classes set up, insert a new column to code your students. The easiest method is to just call them student 1, 2, 3, etc. When finished, save a copy for your records. Now, delete all real names, leave only the fake names or numbers. This is what you use to distribute to your class.

### **SAMPLE DATA**

My state reports data by state anchors, so the sample data that I am supplying is in this form. Anchor A is Numbers and Operations, Anchor B is Measurement, Anchor C is Geometry, Anchor D is Algebra and Anchor E is Data Analysis and Probability.

CLASS 1

<b>Student</b>	<b>Math Anchor A Raw Score</b>	<b>Math Anchor B Raw Score</b>	<b>Math Anchor C Raw Score</b>	<b>Math Anchor D Raw Score</b>	<b>Math Anchor E Raw Score</b>
1	30	11	9	6	9
2	27	11	7	13	9
3	19	8	6	7	9
4	26	11	8	7	9
5	29	11	10	11	9
6	25	10	10	7	9
7	20	10	9	5	7
8	19	9	8	3	5
9	29	12	11	5	9
10	26	10	10	7	8
11	29	11	9	6	10
12	32	11	9	6	6
13	27	9	7	12	6
14	29	11	9	9	12
15	29	12	10	12	9
16	27	9	10	9	10
17	27	11	9	9	9
18	28	12	8	9	9
19	26	10	7	13	8
20	24	11	8	6	9
21	30	12	10	7	9
22	27	11	10	10	12
23	25	12	10	10	8
24	23	9	10	7	8
25	28	10	9	9	10

**CLASS 2**

Student	Math Anchor A Raw Score	Math Anchor B Raw Score	Math Anchor C Raw Score	Math Anchor D Raw Score	Math Anchor E Raw Score
1	19	9	9	8	8
2	30	11	10	9	10
3	21	7	7	8	9
4	28	11	9	7	9
5	30	10	7	7	9
6	28	9	8	12	8
7	30	12	9	6	6
8	30	12	6	13	8
9	28	12	10	9	9
10	26	12	10	9	9
11	16	8	8	7	9
12	32	11	10	6	9
13	29	10	8	8	9
14	28	10	8	14	9
15	26	9	11	8	10
16	26	11	7	9	10
17	24	11	9	7	9
18	31	11	9	10	10
19	20	5	7	7	5
20	21	10	7	8	12
21	16	10	8	7	4
22	24	8	8	8	7
23	9	5	6	4	2
24	19	8	9	7	9
25	25	11	9	9	9

**CLASS 3**

Student	Math Anchor A Raw Score	Math Anchor B Raw Score	Math Anchor C Raw Score	Math Anchor D Raw Score	Math Anchor E Raw Score
1	25	10	10	7	9
2	28	8	10	9	8
3	28	9	8	10	9
4	25	11	8	9	9
5	27	11	10	8	9
6	21	11	9	7	7
7	26	11	10	6	9
8	21	10	9	8	7
9	24	11	9	9	4
10	23	11	9	6	9
11	23	12	8	5	4
12	28	11	8	8	9
13	31	10	6	8	9
14	29	12	7	12	9
15	27	9	7	6	12
16	25	12	9	9	9
17	27	10	9	9	10
18	17	10	6	7	7
19	27	11	7	11	9
20	23	7	7	5	7
21	28	12	7	9	9
22	25	9	9	7	8
23	30	12	10	9	11
24	22	8	7	8	8
25	14	10	9	7	8

**CLASS 4**

Student	Math Anchor A Raw Score	Math Anchor B Raw Score	Math Anchor C Raw Score	Math Anchor D Raw Score	Math Anchor E Raw Score
1	28	11	10	9	10
2	24	11	9	8	9
3	23	10	8	10	8
4	31	11	10	7	8
5	22	9	8	9	10
6	16	9	8	5	4
7	28	12	9	11	8
8	11	10	6	3	4
9	16	9	7	7	4
10	25	11	7	8	9
11	9	8	10	2	5
12	13	10	10	6	8
13	14	9	9	7	7
14	19	9	7	6	8
15	23	10	10	4	9
16	13	7	8	5	6
17	28	12	8	8	10
18	18	11	9	6	7
19	23	8	7	3	7
20	13	5	3	2	3
21	17	4	5	5	4
22	18	8	5	5	8
23	19	10	7	7	8
24	15	9	8	5	3
25	14	9	4	6	5

**CLASS 5**

Student	Math Anchor A Raw Score	Math Anchor B Raw Score	Math Anchor C Raw Score	Math Anchor D Raw Score	Math Anchor E Raw Score
1	25	11	7	8	9
2	26	9	5	8	5
3	30	11	9	6	12
4	26	10	10	10	7
5	30	11	11	11	10
6	28	9	9	6	8
7	20	8	8	4	9
8	27	9	9	9	9
9	26	11	9	8	8
10	22	11	9	13	6
11	13	6	7	9	4
12	25	8	8	8	11
13	28	11	8	9	12
14	17	9	6	7	6
15	20	10	8	6	6
16	21	8	10	5	7
17	28	10	9	12	8
18	20	9	6	5	9
19	13	2	7	3	4
20	19	10	6	5	7
21	29	11	10	9	10
22	30	11	10	8	8
23	24	10	6	4	7
24	11	8	6	3	5
25	28	12	8	6	9

**CLASS 6**

Student	Math Anchor A Raw Score	Math Anchor B Raw Score	Math Anchor C Raw Score	Math Anchor D Raw Score	Math Anchor E Raw Score
1	30	12	10	12	8
2	16	9	8	6	9
3	25	7	8	5	9
4	24	10	8	9	10
5	28	10	6	9	9
6	23	9	10	8	8
7	22	9	8	5	8
8	30	12	9	13	8
9	8	5	6	6	5
10	29	11	8	14	9
11	16	10	9	3	5
12	29	11	10	10	11
13	10	3	6	3	2
14	10	7	8	4	7
15	21	10	10	9	9
16	26	9	11	10	9
17	22	11	6	8	8
18	30	12	9	8	8
19	10	7	5	3	5
20	25	12	9	9	11
21	14	9	7	5	8
22	24	7	7	5	6
23	23	11	10	6	8
24	28	9	8	8	9
25	15	8	7	3	4

## **POSSIBLE POINTS**

The final step is to report the possible points in each standard. Following is the possible points for the sample data.

Anchor A: