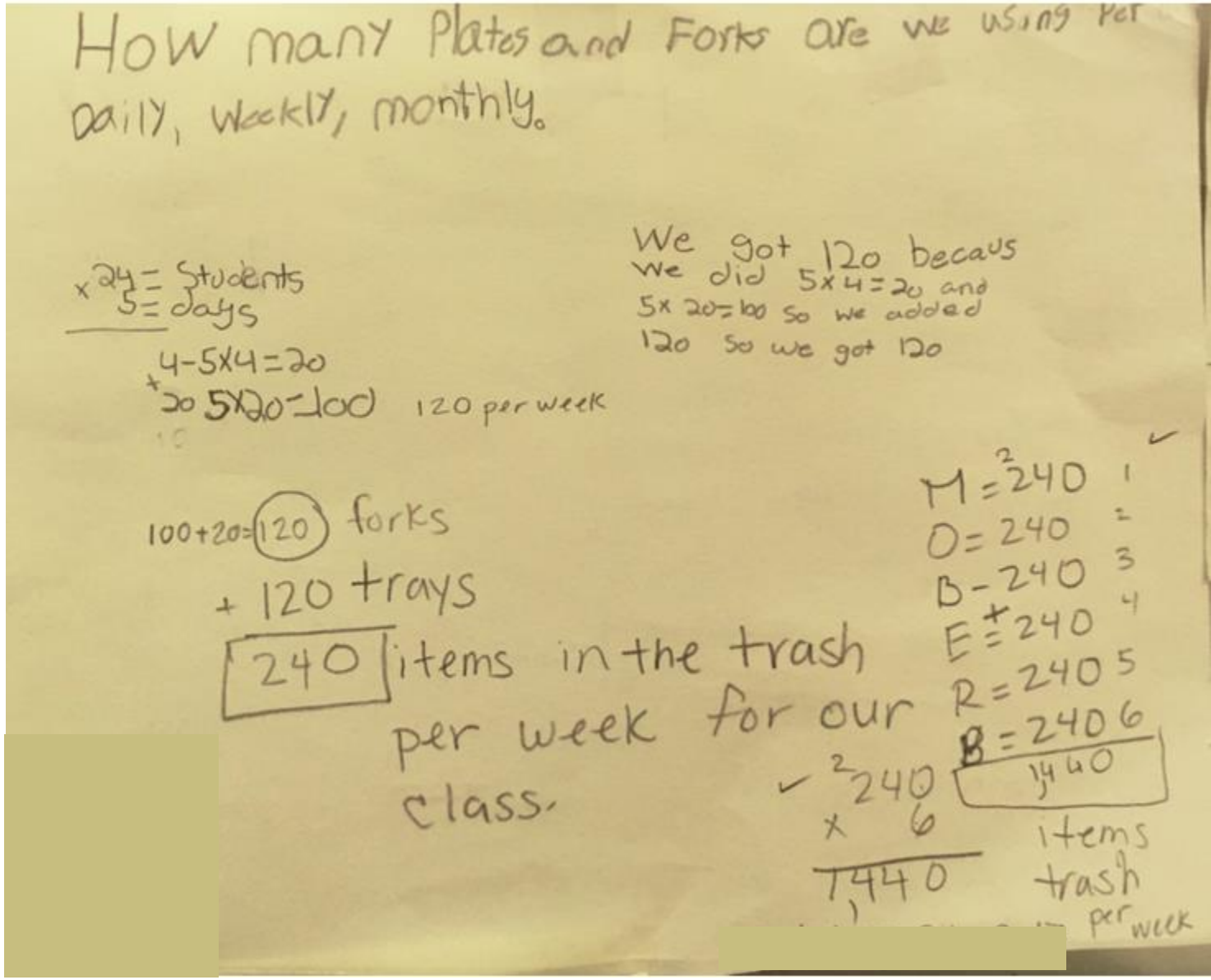
M2C3 – Cafeteria Waste Task

Annotated Teacher and Student Work

The following provides Grade 3 and Grade 4 solutions to the Cafeteria Waste Task.

Grade 3

With 24 students in the class and 5 school days in a week, student multiplied to find that 120 trays and 120 forks could be used each week. They multiplied 5 x 24 = 5(20+4) = 100 +20 = 120.
The six Grade-3 classes would throw away 6 x 240 items each week. The students used a traditional multiplication algorithm and repeated addition to multiply 6 x 240 finding a product of 1440 both times.

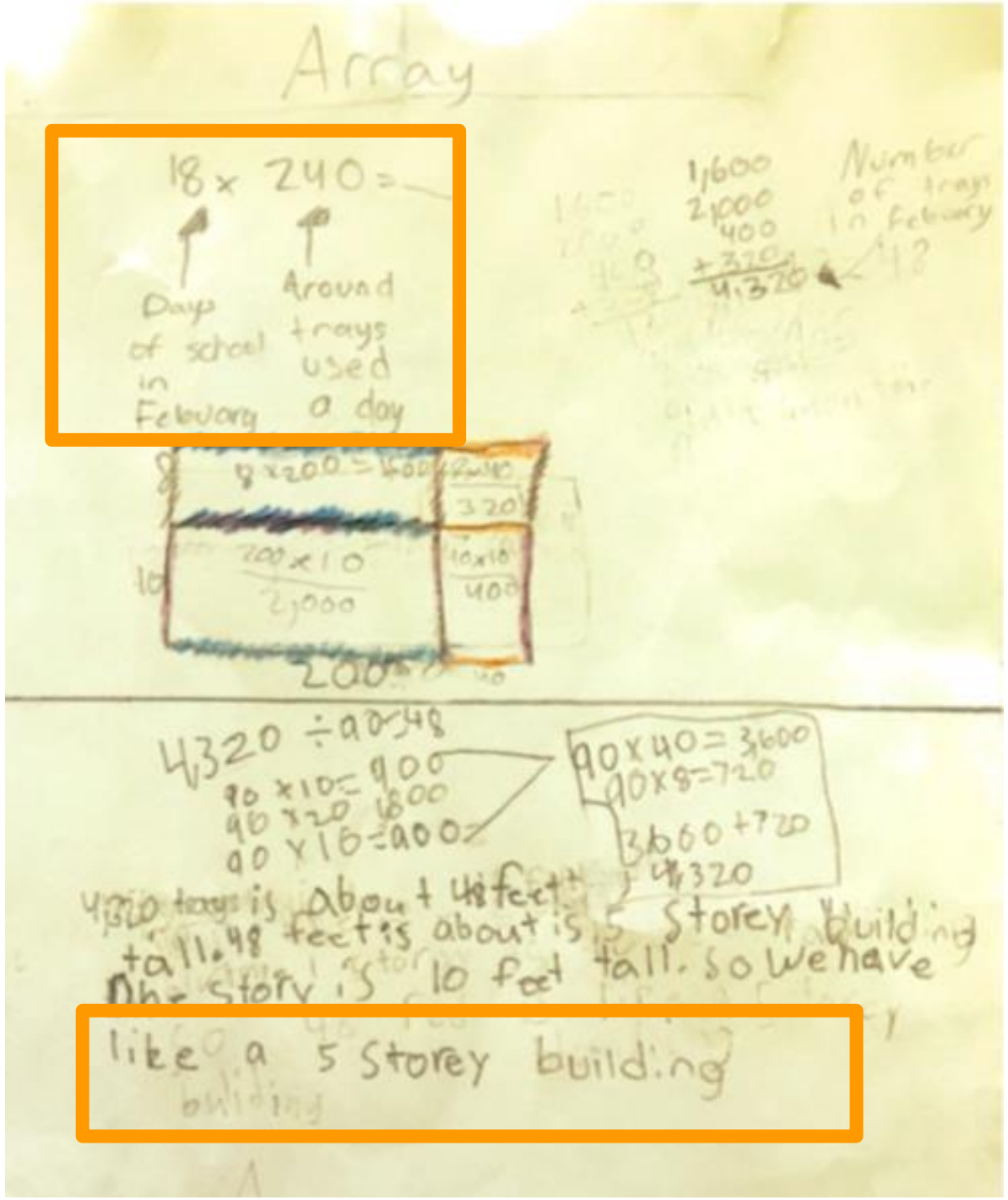


Grade 3

Grade 3 students estimated that students at their school used 240 trays per day for lunch.

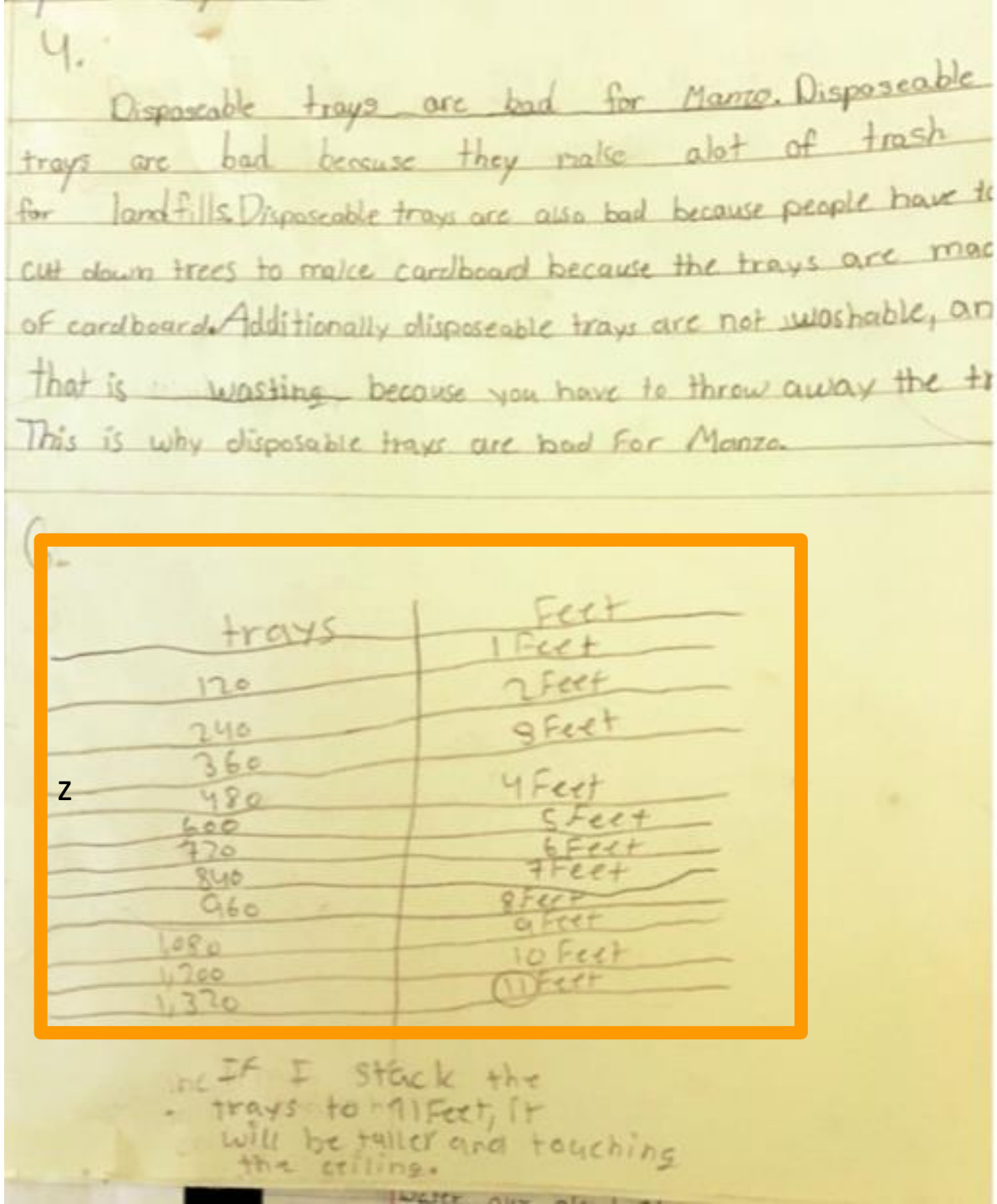
In the month of February, they used 4,320 trays.

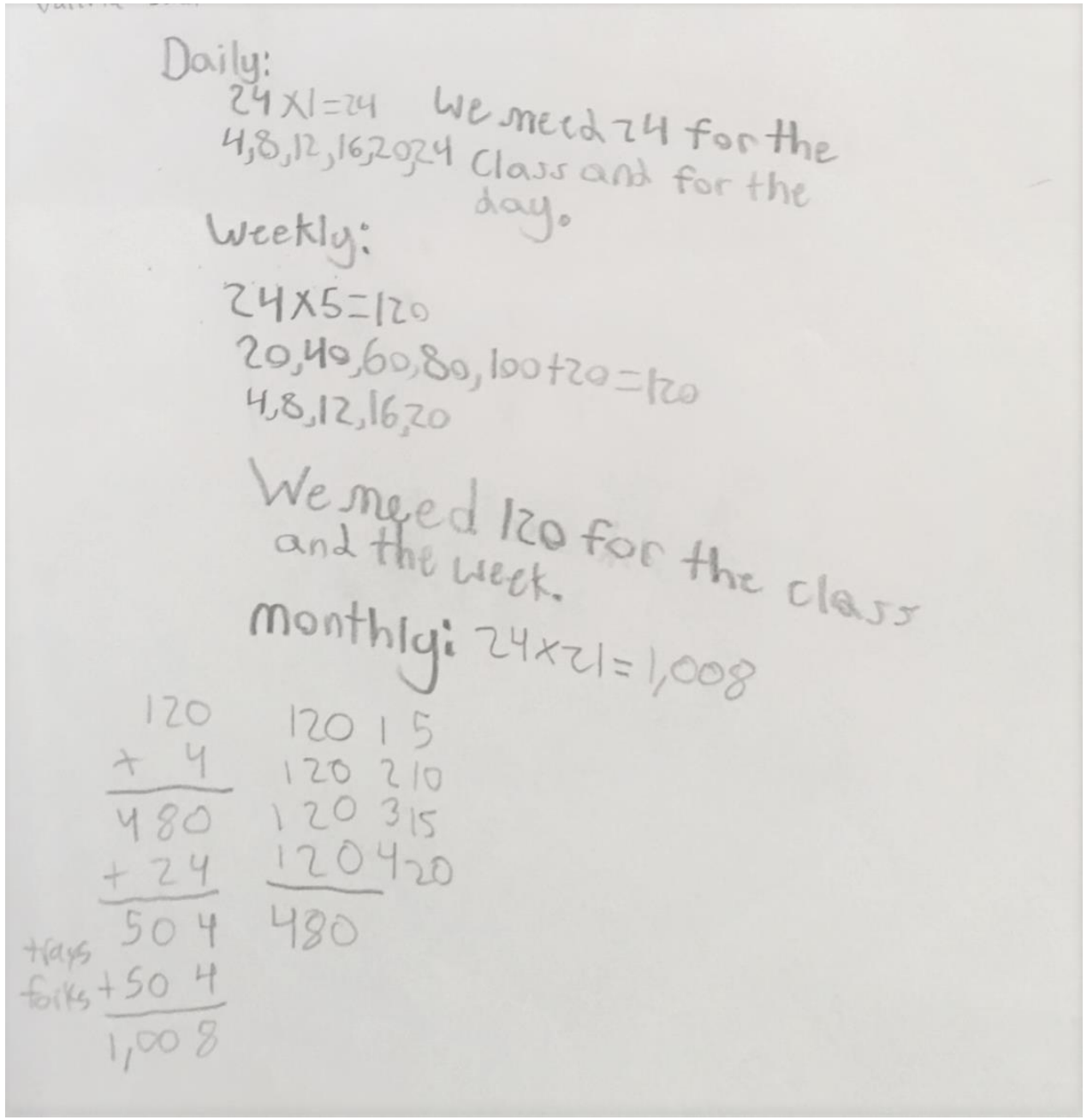
They measured tray height, and if about 90 stacked trays measured one foot, then 4,320 stacked trays would be as tall as a 5 story building!



Grade 3

Students used the stacks of trays to figure out how many trays would make a stack that was about 1 foot high. They created a table to show how the number would grow to 11 feet with 1,370 trays.





Grade 4

This grade 4 student multiplied 24 student using trays times 5 days per week by decomposing 24 into 20 + 4 and skip counting each 5 times adding the result together.

They found that they used 120 trays each week,

Students used pictures of stacks of trays and piles of plastic forks to visualize the number of items thrown away each day across all elementary schools in the district.