

Submitted by: GENERATION CURES

**TITLE:** MULTIPLES OF TEN

**SUBJECT:** Mathematics

**GRADE:** 3rd

**RECOMMENDED TIME:** 30 minutes

**GENERATION CURES CONTENT:** Zebrafish Webisode 6-Spreading Z Word

**LEARNING GOALS:**

Students should be able to exhibit an understanding of the base-ten (10) number system by multiplying whole, positive numbers to at least 2,000 and demonstrating an understanding of the values of each digit place (e.g. tens, hundreds, thousands).

**RESOURCES/MATERIALS NEEDED:**

- Computer / Internet / Projector
- Pen / Pencil / Paper
- Zebrafish Webisode 6-Spreading Z Word ([www.kids.generationcures.org](http://www.kids.generationcures.org))
- Dictionary: Define terms
  - Grassroots- refers to the basic or fundamentals of an organization or campaign. In Zebrafish, Tanya refers to the grassroots as the fundamental supporters of the concert.
  - Multiplication- one of four basic operations of elementary arithmetic, in which a number is added to itself a specified number of times. (E.g.  $3 \times 4 = 3 + 3 + 3 + 3 = 12$ )

**BACKGROUND:**

While the Zebrafish work out the details of their concert, Plinko gets his chance to impress Tanya by talking Principal Pompano into allowing the concert in the school auditorium. Walt incorrectly calculates the number of people the school auditorium holds, and the Zebrafish have to invite 2,000 people instead of the original 200! The good news is that the principal says the concert is a go for Zebrafish, the whole school, and the research they are going to support!

**LESSON STEPS:**

- Allow students to watch the webisode titled “Spreading Z Word” (#6) and afterwards ask them how many more students the Zebrafish need to invite to the concert (*1,800*).
- Creating a chart: With the students using their own paper, draw the following chart on the board, allowing the students to copy it while asking questions. Tell students that the numbers in the left column multiplied by the top row result in the corresponding product.

Example:

1	2	3	4	5	6	7	8	9	10
10	20	30	40	50	60	70	80	90	100
100	200	300	400	500	600	700	800	900	1000
200	400	600	800	1000	1200	1400	1600	1800	2000
300	600	900	1200	1500	1800	2100	2400	2700	3000
400	800	1200	1600	2000	2400	2800	3200	3600	4000
500	1000	1500	2000	2500	3000	3500	4000	4500	5000

- Students should begin with the multiples of ten (10), learning that multiples of ten multiplied by one (1) produce that same number, adding a zero (0) to the end product.  $5 \times 10 = 50$ .
- Instruct students that the same process of adding zeros occurs when they multiply a number by 100.  $5 \times 100 = 500$ .

#### EXTENSIONS:

- Instruct students to visit [www.multiplication.com](http://www.multiplication.com) with a parent and play through a number of the games.