

# Activity Guide - Numerical Accuracy











## Overview

You've managed to escape the zombie outbreak and find help. You're also able to survey your town and see how many zombies were actually wandering around the town. Here is the data comparing the predicted number of zombies with the actual number of zombies:

### Checking Our Accuracy

Location	Actual	Prediction	Exact Match?	Within 5?	Within 20?
A	40	25	No	No	Yes
B	72	74	No	Yes	Yes
C	31	35	No	Yes	Yes

Other teams were also trying to predict how many zombies were in their towns. Using the data below, calculate the accuracy in three different ways: exact matches, within 5, and within 20.

Location	Actual	Prediction	Exact Match?	Within 5?	Within 20?
	32	35	No	Yes	Yes
	56	72	No	No	Yes
	22	19	No	Yes	Yes
	33	33	Yes	Yes	Yes
	85	81	No	Yes	Yes
	34	73	No	No	No
	53	56	No	Yes	Yes
	2	0	No	Yes	Yes
	82	55	No	No	No
	76	80	No	Yes	Yes

How many predictions were an exact match to the actual value? 1 / 10 = 10 %

How many predictions were within 5 of the actual value? 7 / 10 = 70 %

How many predictions were within 20 of the actual value? 8 / 10 = 80 %