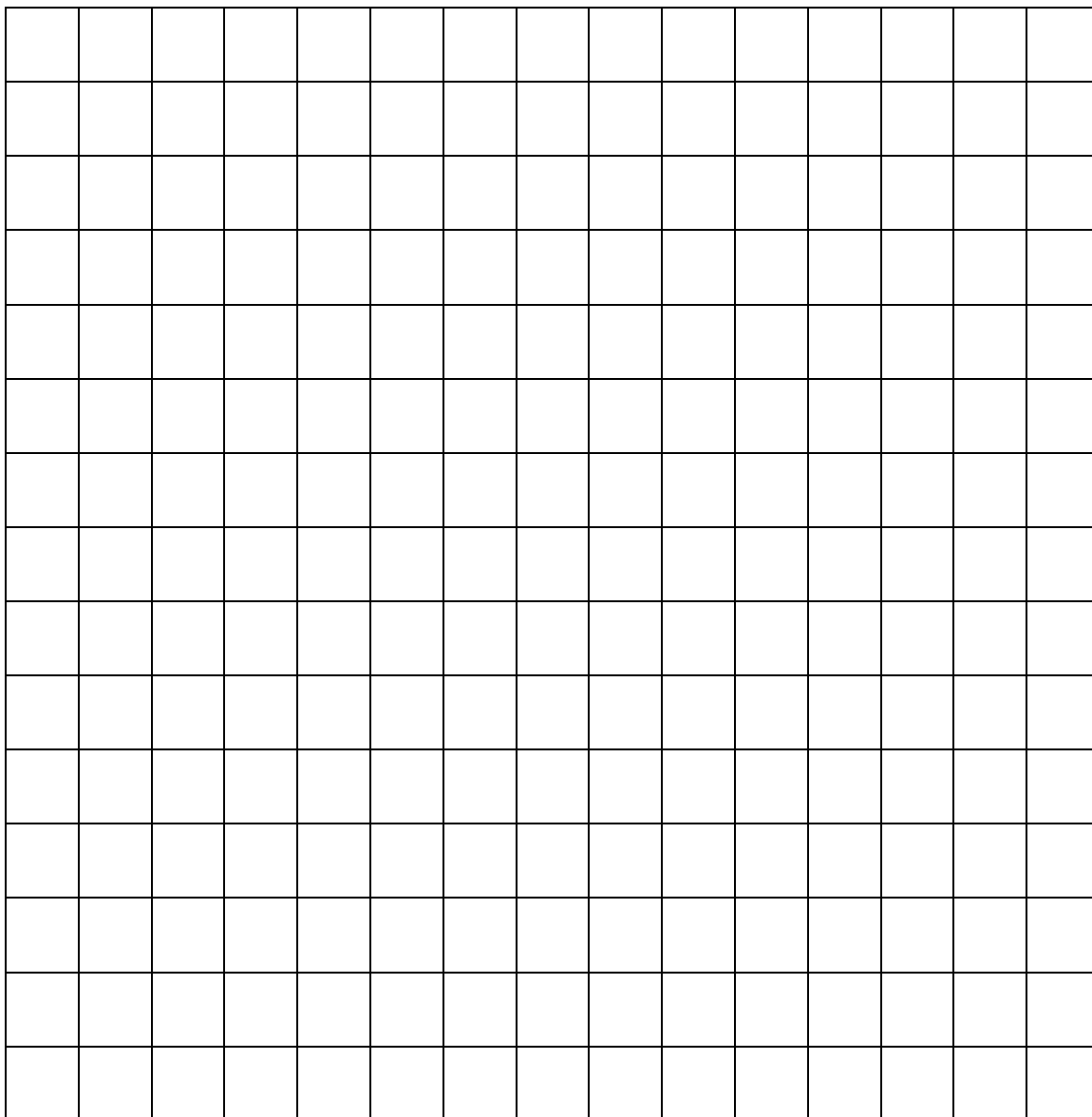


# RESEARCH PROJECT #1

## How Many Neutrinos?

Hold up your hand and count “1 Mississippi”. In that time, trillions of neutrinos flew right through your hand! In fact, 3 trillion neutrinos pass through a square centimeter in a second! You can figure out how many neutrinos go through YOUR very own hand every second by doing this project.

**First, trace your hand on this grid.**



Each box is about one square centimeter. **Lightly shade in the boxes that your hand has covered.** Now **count up the boxes** that you have shaded in. (Every two half-boxes make one more whole one). Write the number of colored boxes here:

Your hand is \_\_\_\_\_ boxes (or square centimeters) big.

Now here is where you need to do some math. You can use a calculator or ask a parent to help you. Take your number and multiply it by 3:

\_\_\_\_\_ (square centimeters) x 3 = \_\_\_\_\_

This is how many trillion neutrinos go through your hand every second!