

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## **2x4 Plates**

You have two 2x4 Lego plates. You start with one plate flat on the table in front of you. How many different ways can you position the second plate on top of the first one, so it is connected by at least one stud?

Extension: How many of your positions are connected by one stud? Two studs? Three studs... Eight studs?

*Show your work, and write your answer in a complete sentence.*