Square numbers are the set of numbers \{0, 1, 4, 9, 16, 25, \ldots\}. If a number is a square number, it can be modeled by a square. For example, 9 is a square number because 9 blocks can be made into a square.

Task 1A
The number 1 is a square number. Is 1 + 1 a square number? How do you know?

Task 1B
The numbers 4 and 9 are square numbers. Is 4 + 9 a square number? How do you know?

Task 1C
The numbers 16 and 25 are square numbers. Is 16 + 25 a square number? How do you know?

Task 1D
Create 3 more addition statements with square numbers and determine if the sums are square numbers.

_____ + _____ = _____  Is the sum square?

_____ + _____ = _____  Is the sum square?

_____ + _____ = _____  Is the sum square?

Task 1E
Can the sum of two square numbers be a square number? If so, give an example.

Task 1F
Are the square numbers closed under addition? Explain.
Square Numbers Closure Activity

Name _______________________

Task 2A
The number 1 is a square number. Is 1 x 1 a square number? How do you know?

Task 2B
The numbers 4 and 9 are square numbers. Is 4 x 9 a square number? How do you know?

Task 2C
The numbers 16 and 25 are square numbers. Is 16 x 25 a square number? How do you know?

Task 2D
Create 3 more multiplication statements with square numbers and determine if the sums are square numbers.

_____ x _____ = _____  Is the product square?

_____ x _____ = _____  Is the product square?

_____ x _____ = _____  Is the product square?

Task 2E
Are the square numbers closed under multiplication? Explain.

Task 3A
List 2 things you learned about mathematics by doing this activity.

Task 3B
List any questions you have.