Jelly Beans Galore

Pythagorean Theorem Discovery

Directions: Fill boxes a and b with Jelly Beans, once you have done this count the Jelly Beans in each box. Then fill box c with Jelly Beans, and count those Jelly Beans. Finally, see if you notice any similarities or conclusions between boxes a, b, and c.

Discovery:

Model #1: Box a: _______; Box b: _______; Box c: _______.
Conjecture about a, b, and c: ___________________________________________________

Model #2: Box a: _______; Box b: _______; Box c: _______.
Conjecture about a, b, and c: ___________________________________________________

Model #3: Box a: _______; Box b: _______; Box c: _______.
Conjecture about a, b, and c: ___________________________________________________

Model #4: Box a: _______; Box b: _______; Box c: _______.
Conjecture about a, b, and c: ___________________________________________________

Model #5: Box a: _______; Box b: _______; Box c: _______.
Conjecture about a, b, and c: ___________________________________________________

Conclusions:

1. What do you notice about the values of a, b, and c? _______________________________________
   ________________________________________________________________________________

2. How do you find the area of a square? _________________________________________________
   ________________________________________________________________________________

3. What formula can you derive from these models? _______________________________________
   ________________________________________________________________________________

Challenge: Can you create your own model that represents your conclusions/conjectures you created/found? Sketch your model below: