



Class Quilt

Mr. Carpenter's 28 students are making a paper quilt. Each student decorated a square piece of paper. Now, Mr. Carpenter has to decide how to arrange the 28 squares. Help him find the best way to arrange the quilt squares.

- 1 How many different ways can Mr. Carpenter arrange the 28 squares? (How many arrays can he make using 28 squares?) Draw the arrangements and label them with their factors.
- 2 Which arrangement do you think Mr. Carpenter should choose? Why?
- 3 A new student joins Mr. Carpenter's class. Now he has 29 quilt squares to arrange. How many arrays can he make with 29 quilt squares?
- 4 **CHALLENGE** Do you think Mr. Carpenter should use a rectangle to arrange the 29 quilt squares? If not, what shape should he use? Explain your thinking.