

Making Conjectures and Arguments

Home Link 8-4

NAME

DATE

TIME

Family Note Today your child learned how conjectures and arguments are related. In mathematics, a **conjecture** is a statement that is thought to be true, and an **argument** is the mathematical reasoning used to show whether a conjecture is true or false. In the problem below, children are asked to find two different ways band members can be arranged for marching. Then they are asked to choose which arrangement they think is better. When children are asked to explain the reasoning for their choice, they are being asked to make an argument. Encourage your child to show the mathematical reasoning he or she used in the explanation for which arrangement is better.

Please return this Home Link to school tomorrow.

- ① There are 24 members in the school band. The band director wants them to march in rows with the same number of band members in each row. Find two different ways that the band members can be arranged. Draw a sketch that shows each arrangement.



- ② Which way do you think is better? Explain your reasoning.