

Quality Talk Activity Worksheet

Identify Argumentation Components

Name: _____

Directions: In the script below, students are discussing an authentic question about the bunny hutch problem. Read the script and identify when students use argumentation by circling any claims, underlining evidence, and putting a box around reasoning.

Teacher: Do you think the number of bunnies is a multiple of 8?

Student 1: I think we could use a multiple of 8 to figure out the number of bunnies because if we knew the number of hutches, then we could multiply by 8 and add 1. The second sentence of the task says that. Ten hutches would make 81 bunnies because 8 bunnies times 10 hutches plus 1 bunny equals 81 bunnies.



Student 3: Yeah, but it seems like we should think about multiples of 11 instead of 8. The task tells us that there could be exactly 11 bunnies in each hutch except one completely empty hutch.

Student 4: If the answer is a multiple of 11, then there could be 22 bunnies and 3 hutches because the bunnies would be in 2 hutches and 1 hutch would be empty. 11 times 2 is 22.

Student 2: 22 bunnies and 3 hutches doesn't work with the part of the task that says, "If 8 bunnies move into the hutch, 1 bunny is left homeless." $8 + 8 + 8 + 1 = 25$. 22 and 25 are not equivalent numbers of bunnies.

Student 1: How are the two parts involving 8 and 11 connected to each other?

Student 3: We need to use both pieces of information at the same time. If we only think about multiples of 11, we might not find a number that leaves 1 homeless bunny when 8 are in each hutch . . . 11 bunnies, 22 bunnies, 33 bunnies.

Student 2: Right. The task says that both are true, so we need to see if each possibility works for 8 times the number of hutches plus 1.