accessible audio transcript

Teach

Watching my focal child work was really interesting!

The first thing I saw him to was look for combinations of bicycles and go-carts that equaled 54 wheels. I did see him do some multiplication problems on his handout and after about a minute, he told his partner that he figured it out; 10 go-carts and 7 bicycles. And his partner agreed.

I asked how he knew he had the right answer and he explained that 10 go-carts have 40 wheels and 7 bicycles have 14 wheels so together those 17 vehicles had 54 wheels.

Knowing that his solution took care of only one of the two variables, I asked what else we knew about what was in the Wheel Shop, and his partner reminded us that there were 21 seats. The focal student dropped his head into his hands and muttered that there could only be 21 vehicles.

The boys started putting the bike and go-cart pictures on their 'Wheel Shop' placemat. First they put 10 bikes on the bike side and 11 go-carts on the other. So now they had 21 seats, but 64 wheels; 10 more wheels than they needed.

They did not give up! After about a minute, my focal student said he could take away a go-cart and replace it with a bike to keep the seats the same but lower the number of wheels by two. The partners stuck with it, removing one go-cart and replacing it with a bicycle and eventually they got to the right answer…15 bikes and 6 go-carts!