Hypothesis- Which apple will win the race?

When you answer questions about what you think will happen in a science experiment, you're making a hypothesis. Fill in the blanks with your hypothesis about Rusty's Rot Race below:

My hypothesis:

The apple we put in the _____ bin will decompose faster than the apple we put in the

_____bin because _____

_____.

Therefore, the apple we put in the _____ bin will win Rusty's Rot Race.

Stage 1: From the Bin to the Truck

Your school's custodian uses a schedule like the one below to help get what we throw in the bin to the curb outside the school. From the curb, the NYC Department of Sanitation (DSNY) picks up what we throw away and takes it to the compost pile or the garbage pile (landfill).

Use the chart to find out how long it will take the two apples to be picked up by the Department of Sanitation workers outside your school. Start by filling in the blanks for Apple 1 and Apple 2.

Department of Sanitation Pick-Up Schedule

Apple	Material Type	Instructions	Pick-Up Time	MON	TUES	WED	THURS	FRI	SAT
	organics		5:00pm	X	X	X	X	X	
	trash*	in clear bags	7:00am		X		X		X

Today is _____ and the time is _____.

The next time DSNY picks up **Apple 1** is on _____(day) at _____(time).

The next time DSNY picks up **Apple 2** is on _____ (day) at _____(time).

It will take _____# of hours for **Apple 1** to get from the bin to the truck.

And it will take _____# hours for **Apple 2** to get from the bin to the truck.

At the end of Stage 1, _____will be winning the Rot Race.

Stage 2: From the Truck to Away

Apple 1 is traveling to McEnroe Farms in Millerton, New York – a compost facility located about 90 miles from New York City.

Apple 2 is on its way to the landfill- Laurel Highlands Landfill in Johnstown, Pennsylvania. This pile is located about 300 miles from New York City.

Both apples are traveling on trucks that are driving 60 miles per hour.

Use the property of division to figure out how long it will take Apple 1 and Apple 2 to get to the landfill and the compost facility:

It will take _____ #hours for Apple 1 to get from the truck to the compost facility.

And it will take _____ # hours for Apple 2 to get from the truck to the landfill.
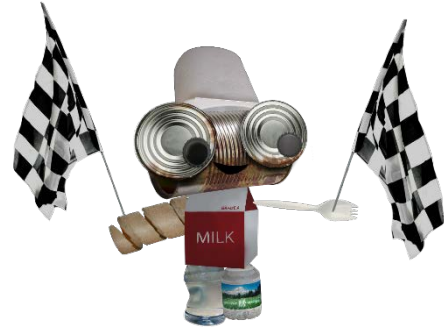
Show your work:

Use the property of addition to figure out who is winning the Rot Race- Apple 1 or Apple 2- after the end of the **Stage 1** *and* **Stage 2**:

In total, it will take _____ # of hours for Apple 1 to get from the bin to the compost facility.

In total, it will take _____ # of hours for Apple 2 to get from the bin to the landfill.

So, at the end of Stage 2, _____) (Apple 1 or 2) will be winning the Rot Race.