## TMA 4<sup>th</sup> grade Hot Compost INTRO Script for Garden Masters:

Give this intro to the students each time they do hot composting

"Hello, my name is	
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Raise your hand if you were at TMA in 2<sup>nd</sup> grade and did worm composting.

OK, what did you do in worm composting?

- 1. You fed the earthworms old fruits and veggies
- 2. The earthworms ate the old fruits and veggies
- 3. The earthworms POOPED!
- 4. The EARTHWORM POOP, or CASTINGS, was fertilizer for the plants in the garden

Did you have to clean the worm poop before we put it into the soil?

NO! We just take it out of the worm bin and put it right into the soil... the worm poop is fertilizer for the plants.

Now, this year, in 4<sup>th</sup> grade, we are doing HOT COMPOSTING.

HOT COMPOSTING is similar to worm composting, but instead of feeding earthworms, we are feeding MICROSCOPIC DECOMPOSERS.

Look at the compost piles behind you...

The MICROSCOPIC DECOMPOSERS eat the leaves and grass in these piles, and their waste is fertilizer for the plants.

Everyone say "MICROSCOPIC DECOMPOSER", and put your microscope to your eye...

Good, what does MICROSCOPIC mean? It means we can only see it with a MICROSCOPE.

What is a DECOMPOSER? A DECOMPOSER breaks down plant materials and recycles them into usable nutrients for plants... it recycles the plants into fertilizer.

## The kind of MICROSCOPIC DECOMPOSERS we feed in our HOT COMPOST bins are BACTERIA.

Look at the HOT COMPOST bins. In each one of these bins there are BILLIONS of BACTERIA.

We cannot pick up these BACTERIA and count them, like we can with EARTHWORMS.

We know that there are BACTERIA in our compost piles because the piles HEAT UP!

That is why we call it HOT COMPOST!!

The HEAT is coming from the bodies of the BACTERIA. It is not coming from the sun, or the air... The HEAT is coming from the bodies of the BACTERIA!

(YES GMs, repeat this for emphasis! Many times if possible)

If the pile heats up, we know there are lots of BACTERIA in the pile. The more BACTERIA are in the piles, the faster the leaves and grass will break down and turn into fertilizer!

These HOT COMPOST piles CAN get as hot at 140 degrees Fahrenheit!!

That is hotter than a jacuzzi... SO hot that if you put your hand in the pile it could get burned!

The kind of BACTERIA we want in our HOT COMPOST piles is called AEROBIC BACTERIA.

AEROBIC means "WITH OXYGEN"... Everyone say: "Aerobic means WITH OXYGEN"

We turn our HOT COMPOST piles to circulate OXYGEN so that the AEROBIC BACTERIA with multiply and thrive.

Each time we come out to do hot composting, we check the TEMPERATURE of the piles, we turn the piles to circulate OXYGEN, then we check MOISTURE levels of the piles to make sure they are not too dry or too wet.

This is what we are going to do today... Are you ready? Good, let's get to work!