

# **FOOD PRODUCTION & RECYCLING**

## **SUSTAINABILITY CITY IN MINECRAFT: EDUCATION EDITION**

Student Name: \_\_\_\_\_

Teacher: \_\_\_\_\_

Subject: \_\_\_\_\_



### **PHASE 1: GROCERY STORE AND FARM**

What wonderful product does the first cashier recommend?

What is one benefit of buying local that is shared by the second cashier?

THE FARM: Irrigation is great, but what major problem occurs when there is more water than the ground can absorb?

From where does the watering machine get its water?

What 4 readings does the irrigation machine monitor to control watering?

What innovative technique is used to make sure soil isn't washed away during winter?

What is the special name for this technique in the last question?

Name 6 nutrients that are helpful for plant growth?

Why isn't it smart to grow the same plants in the same place each year?

What are 4 ways that compost helps farmers?

## ***PHASE 2: COMPOST FACILITY***

What is the source of compost and who delivers it to the farm?



What is a windrow and how long do they take to work?

How is a windrow like a sandwich?

What technology is used in mixing and aeration of the windrows?

What is a tub grinder and how does it help in composting?

What is the key ingredient of nutrient-rich compost?

## ***PHASE 3: RECYCLING PLANT***

Once materials arrive what do workers manually do at the start of the process?



Gravity and filters are used to sort out which material allowing it to fall below for further sorting?

What does a ballistic separator do?

How do they separate cardboard and paper?

How are electromagnets and electromagnetic forces used in recycling?

What are balers and do they create a physical or chemical change in recyclables?

How hot does a glass furnace have to be to melt glass?

Very simply, why should we recycle glass?