| HEAL FEED | <u>Directions:</u> Use the link below and watch th video to complete the questions and activiti |
|-----------|---|
| SUSTAIN ( | in the parenthesis will help you navigate to video. Ex- (12:00)                                 |

Pd

ne video. Pause the ies. The times listed certain spots in the

Date

VIDEO LINK: HEAL, FEED, SUSTAIN

| Biggest Challenge: The video begins with a description of the biggest challenge that the world faces. What is this challenge?  |
|--|
|  |
| Heal: Describe two ways regenerative medicine is being used? (5:00)  |
|  |
| Feed: How does "Green" and "Agriculture" Biotechnology help the word?  |
| What does BASF do? (12:05)   |
|  |
| Sustain: What is "Industrial Biotechnology"? (15:40)   |
| That is massive places in order to the control of t |
| What does Novozymes do? (17:45)  |
|  |

## Activity #1: Biotechnology and You

Name

How Biotechnology

Can Help Save the World

In the beginning of the film, Kendall, Micah and Xavier ask, "What the heck (is) biotechnology? What is it used for? And why should we care?" The film answers these questions and challenges students to find their place in the biotech world. In the space below answer these questions the film presents.

| Name_                      | Pd Date   |  |  |  |  |
|----------------------------|---|--|--|--|--|
|                            |   |  |  |  |  |
|                            |   |  |  |  |  |
|                            |   |  |  |  |  |
|                            |   |  |  |  |  |
| 1.<br>2.                   | With which student did you most closely identify? Micah, Xavier or Kendall? In which setting would you most like to work? Wake Forest Institute for Regenerative Medicine, BASF Plant Science or Novozymes North America? Why?  |  |  |  |  |
|                            |   |  |  |  |  |
| 3.                         | Which has made the most exciting discoveries?     Which section of the video was most interesting? "Heal," "Feed" or "Sustain"?   |  |  |  |  |
| 4.                         | which section of the video was most interesting? Hear, Feed of Sustain!   |  |  |  |  |
| <u> </u>                   | Which area do you think provides the most benefits? "Heal," "Feed" or "Sustain"?Why?  |  |  |  |  |
| _                          |   |  |  |  |  |
| 6.                         | With which employee did you most identify? Dr. Christ, Katie or James? Why?   |  |  |  |  |
| _                          |   |  |  |  |  |
| 7.                         | How does or could biotechnology affect your life? Be specific.  |  |  |  |  |
|                            |   |  |  |  |  |
|                            |   |  |  |  |  |
|                            | y #2: Where do people work?   |  |  |  |  |
| medici<br>people<br>biotec | "Heal" section, biopharmaceuticals and regenerative medicine are highlighted. Micah explains, "Beyond nes, though, there are also scientists who are always helping people to heal by growing new tissue or organs for — often right from their own cells. It sounds like science fiction, but it's real." In this amazing world of medical nhology, people from a variety of technical specialties who do very different jobs work together to find ways to be world. Go back and watch the following segments on jobs using these times: (9:00, 13:15, 19:45) |  |  |  |  |
| 1.                         | Make a list of all the jobs you saw or heard about.   |  |  |  |  |
|                            |   |  |  |  |  |
| 2.                         | Which job do you think will make the biggest impact on the world? Why?  |  |  |  |  |
| 3.                         | Which job do you think will change the most in the next 10 years? Why?  |  |  |  |  |
| ٦.                         |   |  |  |  |  |
| 4.                         | What biotechnology job would you most and least enjoy doing and why?  |  |  |  |  |
|                            |   |  |  |  |  |

| Name  | Pd | Date |  |  |
|---|----|------|--|--|
|   |    |      |  |  |
| Watch the following videos if you complete the above questions.               |    |      |  |  |
| You will need to scroll down on the webpage and press the full screen button. |    |      |  |  |
| You do not need to write anything for these videos.                           |    |      |  |  |
|   |    |      |  |  |
| #1. DESIGNER FOODS VIDEO  |    |      |  |  |
|   |    |      |  |  |
|   |    |      |  |  |
| #.2 GENETIC ENGINEERING   |    |      |  |  |
|   |    |      |  |  |
|   |    |      |  |  |
| #3. STEM CELLS DEMYSTIFIED  |    |      |  |  |
|   |    |      |  |  |
| #4 PIOTECH CAREEDS (and a sub-)   |    |      |  |  |
| #4. BIOTECH CAREERS (audio only)  |    |      |  |  |
|   |    |      |  |  |
|   |    |      |  |  |