Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_

**The United Nations Millennium Ecosystem Assessment (MEA)**

The Millennium Ecosystem Assessment (MEA), funded by the UN and started in 2001 (for the new millennium), is a research program that focuses on how ecosystems have changed over the last decades and predicts changes that will happen. In 2005 it released the results of its first 4 year study of the Earth’s natural resources. It was not happy reading. The report said that natural resources (food, freshwater, fisheries, timber, air) are being used in ways that degrade them so make them unsustainable in the longer term. Read the statistics below:

* 60% of world ecosystems have been degraded.
* About 25% of the Earth’s land surface is now cultivated.
* We use 40-50% of all available surface freshwater and water withdrawals from underground sources have doubled over the past 40 years
* Over 25% of all fish stocks are overharvested.
* Since 1980, about 35% of mangroves have been destroyed.
* About 20% of corals have been lost in 20 years and another 20% degraded.
* Nutrient pollution has led to eutrophication of waters and dead coastal zones.
* Species extinction rates are now 100-1000 times above the background rate.
* We have had more effect on the ecosystems of Earth in the last 50 years than ever before.

1. Draw the sustainability Venn Diagram in the box above.

2. Go to the following website <http://www.undp.org/content/undp/en/home/sdgoverview/mdg_goals.html>

Write down the 8 Millennium Development Goals in the space below.



2. If you were asked to be on a committee to help achieve one of these goals, which one would you choose and why?

*Read the highlights of the Millennium Report 2015 that are located in the bulleted list below. These highlights tell the accomplishments of this program since its beginning in 2001.*

3. After you read through all of them, color code them according to where you think they belong in the 3 circled sustainability Venn diagram using blue for environmental sustainability, green for economic sustainability, and red for social sustainability. If you think it hits more than one area, you can put down both colors.

* The number of people now living in extreme poverty has declined by more than half, falling from 1.9 billion in 1990 to 836 million in 2015.
* The number of people in the working middle class—living on more than $4 a day—nearly tripled between 1991 and 2015.
* The proportion of undernourished people in the developing regions dropped by almost half since 1990.
* The number of out-of-school children of primary school age worldwide fell by almost half, to an estimated 57 million in 2015, down from 100 million in 2000.
* Gender parity (access to education for both males and females) in primary school has been achieved in the majority of countries.
* The mortality rate of children under-five was cut by more than half since 1990.
* Since 1990, maternal mortality fell by 45 percent worldwide.
* Over 6.2 million malaria deaths have been averted between 2000 and 2015.
* New HIV infections fell by approximately 40 percent between 2000 and 2013.
* By June 2014, 13.6 million people living with HIV were receiving antiretroviral therapy (ART) globally, an immense increase from just 800,000 in 2003.
* Between 2000 and 2013, tuberculosis prevention, diagnosis and treatment interventions saved an estimated 37 million lives.
* Worldwide 2.1 billion people have gained access to improved sanitation.
* Globally, 147 countries have met the MDG drinking water target, 95 countries have met the MDG sanitation target and 77 countries have met both.
* Official development assistance from developed countries increased 66 percent in real terms from 2000 and 2014, reaching $135.2 billion

4. At the bottom of the web page, click on “2030 Agenda for Sustainable Development”. Instead of 8 goals, there are now 17. Write down the additional 9 goals the UN wants to achieve by the year 2030.