General Science

Name_____________________

Video: The Day After Tomorrow

Directions: The Day After Tomorrow is a movie about the dramatic changes in climate which causes disasters around the globe. Below is a list of questions to help you assess the potential validity of some of the changes depicted in the movie.

You **DO NOT** need to turn this paper in but you will need to write a one page paper (at least 250 words) on the validity of The Day After Tomorrow. The paper needs to address the issue of global warming and possible climate changes due to global warming. You will need to support your opinion of the movie with facts you know about climate and global warming. You will need to address at least five of the following questions in detail from the movie.

1. Jack Hall (Dennis Quaid) is a climatologist studying the effects of global warming. Why is he taking ice core samples from Antarctica? What does this have to do with global warming?

2. The opening scene shows the collapse of a massive ice shelf (a floating glacier) in Antarctica. Could this really happen? If so, how might it affect global sea levels?

3. Is it realistic to think our climate is in a fragile state? What does burning fossil fuels have to do with global warming melting ice caps?

4. At the meeting in India, Jack mentions how the climate is fragile but the vice-president states the economy is even more fragile? Talk about the difference between a fragile economy and a fragile climate. Should the vice-president have dismissed Jack’s claims because of the costs to fix the problems with global warming?

5. What is happening in New York with the animals in the city? Why are all the birds in the city leaving? Why are the animals in the zoo going crazy? Is this a sign? Do animals have a sixth sense which can predict natural disasters?
6. In the movie, tornadoes whip through Los Angeles and flatten the city. New York City is engulfed by an enormous tidal wave and freezes, burying the city in ice. Could this really happen so quickly with these effects?

7. Jack predicts the cause of this drastic climate shift is due to the disruption of the North Atlantic Current. What is the cause of this change in the current? Can this really happen to fast? Can one storm really create an ice age?

8. The movie depicts a massive freeze sweeping across Europe and the northern United States, resulting in a mass migration to Mexico for survival. Is this how global warming is likely to develop? Why or why not? Why were people fleeing to Mexico in the first place? Did the president make the right decision to evacuate ONLY the southern states and leave the people behind in the northern states?

9. Explain what happens in the “eye of the storm.” Why can you survive the eye of the storm if you are inside and have shelter but instantaneously freeze if you are outside? Is it realistic that the fire stayed lit in the library where Sam was and in the shelter where Jack was? (Think about what happened to the fuel in the helicopters in Scotland).

10. Explain the following comment from the astronaut after the storm cleared: “Have you ever seen the air so clear?” What is the significance of this statement?