MODULE 12: MITIGATION AND ADAPTATION

ANSWER SHEET

ACTIVITY ONE

- 1. The home could be insulated either by putting materials in the roof space or using thicker walls.
- 2. A sustainable or renewable source of energy could be used rather than energy produced by burning fossil fuels.
- 3. Sustainable sources of energy include sun, wind and water power, wood for fuel, power from the sea and heat from the ground. These are renewable types of energy source they won't run out. They are also clean and sustainable as they produce little greenhouse gases to produce electricity.
- 4. Improving the ventilation of a room by opening the windows will keep the home cooler. Shutters keep the heat out but still maintain the ventilation. If building a new home the aspect should be considered if possible, having small windows on south and west facing walls.

More about the use of building materials to adapt to climate change around the world can be found at <u>http://www.yourclimateyourlife.org.uk/2_green_solutions.html</u>

An interactive activity can be found at http://www.yourclimateyourlife.org.uk/flash/houses/houses.html

And a downloadable activity at http://www.yourclimateyourlife.org.uk/docs/houses.doc

More about the use of renewable energy can be found at <u>http://www.yourclimateyourlife.org.uk/10_tomorrows.html</u>

ACTIVITY TWO

Adaptation might not be desirable, for example insulation has to be manufactured and uses energy and resources.

There are many reasons for mitigation being desirable, here are **four** examples:

- 1. Not all communities can adapt quickly enough to survive and it is communities where changes are happening most quickly that will find it the most difficult to adapt
- 2. The natural world will find it virtually impossible to adapt quickly enough.
- 3. Stabilising climate now will be cheaper than trying to adapt to changes later
- 4. The rate at which the climate changes will keep getting faster.

ACTIVITY THREE

Students use <u>http://www.21stcenturychallenges.org/challenges/engineering-our-climate/60-seconds/</u> and other internet based research to complete the table. There are other examples of mitigation on this Climate4Classrooms website and elsewhere.

Students could rank the examples according to their effectiveness in pairs or groups and then discuss their ranking with others in the class.





ACTIVITY FOUR

Students could work on their own or in pairs and then they could compare their idea with the rest of the class. They could take photographs or draw pictures of the areas of the school where adaptation or mitigation could take place and make a wall display or a digital presentation which could be presented to the rest of the school to raise awareness of the need for action to reduce the effects of climate change.

Students could study the inspiring stories of other schools from the 'Your Stories' section of the website to investigate how other schools have found their own local solutions to tacking the causes of climate change.





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