B18 and B16 exam – Dom Hill

1. A) Placing the quadrats in random positions provides a fair test

b) **on sheet**

c) The students should attempt to grow dandelion plants in different areas of light intensity to show the number of dandelions that grow there. The student should attempt to grow these plants in 2 different conditions. One area should have excess light, and the other should have limited light (like near the woodland area). The students should use a quadrat in each area to calculate the number of dandelions that grow in that area. The quadrat should be randomly placed or thrown to maintain unbiased results. The plants should also have excess water and minerals, as these could be limiting factors to letting the plants grow. ??

d) 1. Water

2. Minerals

1. For:

The fertilisers will help the crops to grow faster and result more crops being produced, and the farmer will make a larger profit

The pesticides will stop the crops being eaten by pests and this will result in a higher yield of the crops, and the farmer will again make a larger profit

Against:

Fertilisers can run off the fields and into rivers. This can kill wildlife and reduce biodiversity.

Pesticides can sink into the ground, making the ground unfertile for the next farming season

1. A) The peat compost used in gardening was consistent from 1999 to 2005. It dropped a lot in 2007 and dropped a bit lower in 2009.

The peat free compost being used has been increasing at a linear rate since 1999

b) When peat is burn, it releases large amounts of carbon dioxide as it is a carbon sink

c) Deforestation destroys habitats in places like tropical rainforests, this leaves a lot of the organisms in the ecosystem to die or even go extinct.

1. Using coal in power stations can have many negative effects on the environment. When coal is burnt, it releases multiple gases including carbon dioxide and sulphur dioxide.

Carbon dioxide is a greenhouse gas which contributes to the greenhouse effect. Many scientists believe this is causing global warming as the gases are trapping heat in the earth’s atmosphere.

Sulphur dioxide is a gas which contributes to acid rain. When sulphur dioxide reacts with water vapour in the air, it produces sulphuric acid, which can damage the environment by slowly deteriorating it

1. A) carbon dioxide

b) Greenhouse gases contribute to the greenhouse effect. This effect causes the heat reflected from earth to be trapped in its atmosphere. This is known to cause global warming. As the climate changes, polar ice caps can melt in the heat and water expands. This results in the sea levels rising and low-lying places like Bangladesh will face flooding and damage property.

As the temperature increases, water will evaporate quicker. This can lead to droughts in places like Africa where there is a limited water supply.