**Ecological Pyramids Worksheet – ANSWERS**

1 (a)

The number of individual organisms at each specific trophic level of the food chain.

1(b)

Shows the dry weight of the organic/biological tissue of all the organisms at that trophic level (water taken out).

1(c)

Shows the energy (in joules or kilojoules) content at each trophic level. This is the energy in biomass, so this pyramid will be very similar to the biomass pyramid.

2

The biomass has an advantage because it accounts for the actual amount of energy that is passed on to the next level and how much is at each level. Numbers alone can be unclear as the numbers might be high/low but it may not reflect how much energy is present.

3

Because the producers here are huge – massive trees. Each individual producer is large and has a lot of biomass to provide for the next trophic level up.

4(a)

= 1.6% transferred

4(b)

= 8.4% transferred

4(c)

* Possibly because a lot of them die off before they are eaten
* Plankton are small and are in the water – many may be carried away by currents before they get eaten by the next level up

4(d)

Decomposers

4(e)

Because there is a lot of them and they take energy from all of the other trophic levels

5

Because the algae, although low in biomass, are producing a huge amount of energy compared to their size due to constant photsynthesis; also because the zooplankton only have to eat a very small amount of algae to survive and grow.