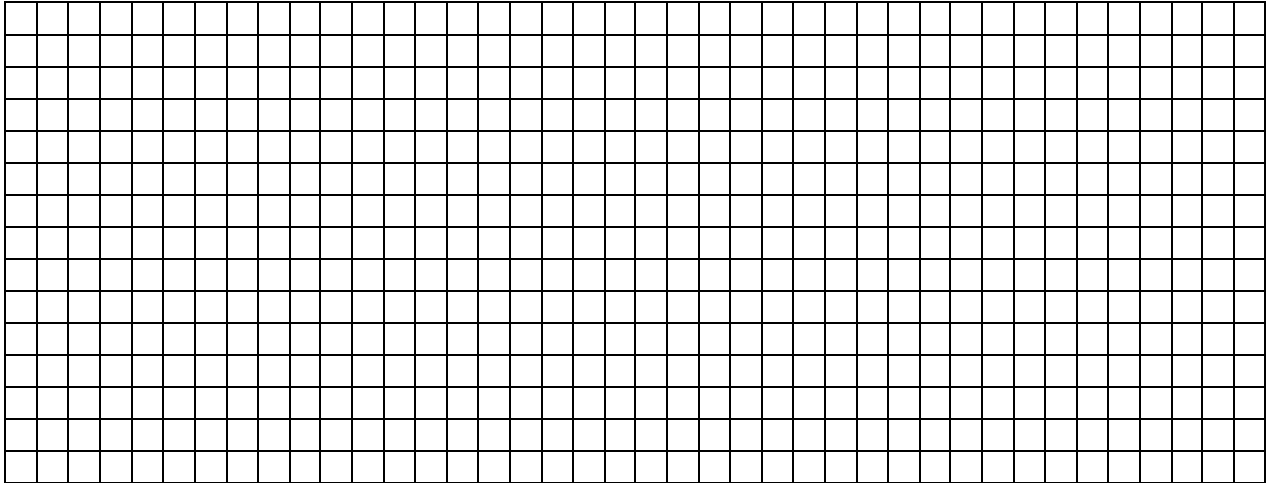


## Analysis of results

1. Using the cards lay out the food web for the organisms found in the aquatic habitat.
2. Identify one organism at each trophic feeding level using the food web above and the results table, e.g. one detritivore; one herbivore; one carnivore; one top carnivore.

Using your data draw a pyramid of numbers below. Label each tropic level.



3. Answer the questions below. Remember to explain your answers.

- (a) If the duck and pond weed were to decline rapidly due to a change in environmental conditions, what effect would this have on the:
- (i) lesser boatman numbers, and (ii) fish populations?

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- (b) If the aquatic habitats were drained at the site due to water from the springs being piped for domestic use, what would be the effect on the bird life in the area?

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- (c) If people were to introduce non-native fish into the water (such as carp and gold fish) what would be the effect on: (i) the fish population; (ii) the invertebrate population over a short and long period?

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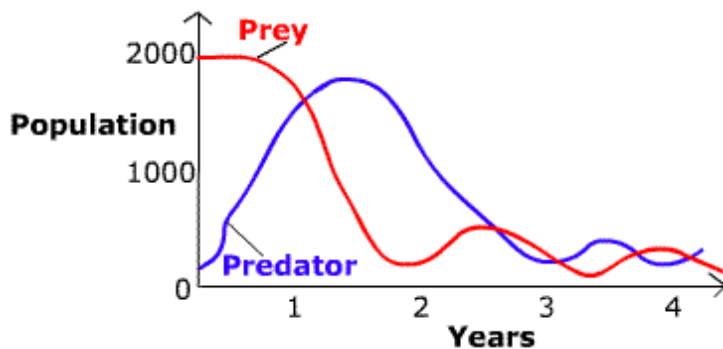
- (d) If the park managers were to use pesticides on the surrounding grassland, what effects could this have on the ponds?

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A graph to show the relationship of organism numbers between a prey and a predator.

#### 4. Extension

- (a) Using the graph above can you explain the changing population numbers of both predator and prey numbers over the years?

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- (b) Draw a graph to show the effect on the fish population (predator) if the dragonfly and mayfly nymph numbers increased dramatically due to a change in environmental conditions.

