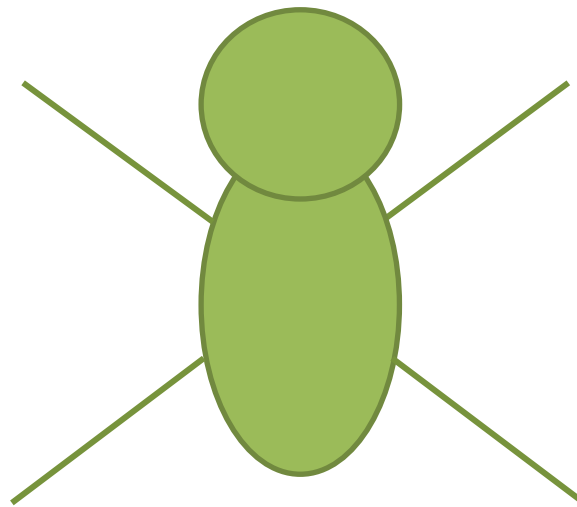


Context

KS4 Biology: mutation, cell division, evolution by natural selection.



Each student needs a picture of the starting animal and a dice. The dice is rolled for each feature, arm length, leg length, body length, head length, body colour, head colour.

Dice roll	Consequence
1	feature grows 1cm longer
2	feature unchanged
3	feature unchanged
4	feature unchanged
5	feature unchanged
6	feature shrinks 1cm



When they are rolling to decide a colour, then 1 means shift one colour to the left, 2- 5 means colour unchanged and 6 means shift one colour to the right.

Roll the dice for each feature ten times and draw the resulting animal.

Collect classes' final animals together.

Suggest a number of different situations and class to discuss which of the animals would be the best adapted to survive.

Suggestions

1. Forest, possibly consider camouflage, arm length for tree climbing
2. Grassland, possibly consider camouflage, leg length for running.....
3. Cold conditions, large body size.....
4. Underground, small head and body short legs and arms

Emphasise that mutations do happen randomly but the chances of it happening are very much smaller and changes tend to be very small.