

Modifications to Jellybean Activity

Disease (or event/disaster/camouflage)

-wipe out 1 bean type

Predator/prey migration or adaptation

-groups moving around

-no selection or remove predators but throw in more jellybeans

-switch jellybean bowls

Geographic isolation

Fitness/competition (not only hunting)

-only some colours reproduce

Draw examples/parallel in nature

-disgusting jellybeans are like bad tasting bugs

Distinguish genotype & phenotype

-e.g. speckled jellybeans have recessive

Mimicry demonstration

-very similar colour beans

Toxins

-certain beans are poisonous, predator dies

Turn off lights and choose

-change the event

Other Ideas for Teaching Evolution

Summarize previous work on evolution

- develop content
- “greatest show on earth”

Case studies

- stickleback evolution
- moth
- bugs

Eating Like a Bird

- items representing different types of food, different utensils to represent different types of beaks

Feeding Frenzy

- different foods on ground, worth different points -> tabulate points to determine survival
- group exercise with a number of rounds (generations)
- incorporate terminology e.g. fitness, adaptation, niche, habitat, natural selection

Predator and prey food chain (pipe cleaners)

- spin with poisonous species introduction

Make a new animal for a specific environment

- create and evaluate traits
- theme of adaptation
- predict what traits will evolve after certain selection and draw

Survivor (like TV show)

- survival traits

Islands with Teddy Grahams

- initial populants—events→ migration
- students present/explain surviving populations
- all survive? Mutation? Births/deaths?

PBS series for evolution/CBC Quirks & Quarks

Comic strip (Natural Selection)

Nova site (Intelligent Design on trial)

Adaptive radiation

Thumbs exercise

-tape thumb to palm, have students try performing daily tasks

Throw coloured Objects in long grass

-pepper moth case study

Genetics: different coloured paperclips represent DNA nucleotides

Predator vs. prey rock, paper, scissors

-different animals/monsters play rock, paper, scissors to see which one survives

Tinfoil people

-make people, put in bucket –flood catastrophe → which float and survive?

-how to adapt?

Students make their own airplanes

-see variation, which can fly past certain points

-mutations: can adapt plane to fly better/worse

Sims Zoo

ipod downloads/podcasts/videos