

## Grasshopper Olympics Long Jump

### Background:

A grasshopper can jump 30 inches. If you could jump that many times your body length, you could cover an entire football field in a single bound.

### Materials:

- Grasshoppers or crickets
- Tape measure

### Methods:

Grasshopper long jump -

- a. How far can a grasshopper jump?
- b. Select a grasshopper, place chosen grasshopper on starting line that is marked on the table. Grasshopper should be cupped in hands.
- c. Open hands and allow grasshopper to jump. Mark the first landing site.
- d. Measure and record distance jumped. Compare distance jumped with the length of the grasshopper's body.
- e. How many times its body length did the grasshopper jump?
- f. Remember to replicate

Standing long jump

- a. Have students stand along a line and jump as far as they can. Measure how far they jumped in inches.
- b. The flea can jump 200 times its body length. Measure the children's height and determine how many of their body length they jumped.
- c. How far would 200 of their body lengths be?
- d. Who jumped further compared to body height, the children or the flea?

### Conclusions:

- Ask students to speculate why insects can jump several times their own body weight and humans can not?
- Compare male vs female grasshoppers
- Compare grasshoppers vs crickets