## Long gump <br> 2nvestigation

The long jump at the Summer Olympics is a sport in athletics (track and field), where athletes compete to jump as far as they can and compare the lengths of their jumps.

Our scientific question: Can the longest legs jump the furthest?
Today we will be investigating what might give some athletes an advantage in the long jump event by comparing the length of someone's leg to the distance they can jump from standing (without a run up).

Before you begin, do you think that the length of someone's leg will affect the distance that they can jump? Why/why not?

My prediction: $\qquad$
$\qquad$
$\qquad$

You will need: - a tape measure (or something to measure length)

- table of results - space to jump from standing
- group of participants. This could be your family or you could ask your friends to share their measurements (leg length and distance jumped) online/virtually.


## Method

1. Measure the leg length of your group.
2. Use tape or a mark to set your start point for your jump.
3. Jump as far as you can from standing (no run up!).
4. Measure the distance you jump.
5. Record your result.
6. Repeat three times.
7. Repeat each step for every member of your group.

Table of Results

| Name | Leg length <br> in cm | Length of <br> first jump <br> in cm | Length of <br> second <br> jump in <br> cm | Length of <br> third jump <br> in cm | Longest <br> jump in <br> cm |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |

(Note: When measuring legs, measure the outside leg from the waist to heel.)

## Findings

Who has the longest legs?

Who jumped the furthest?

My results show that:

